

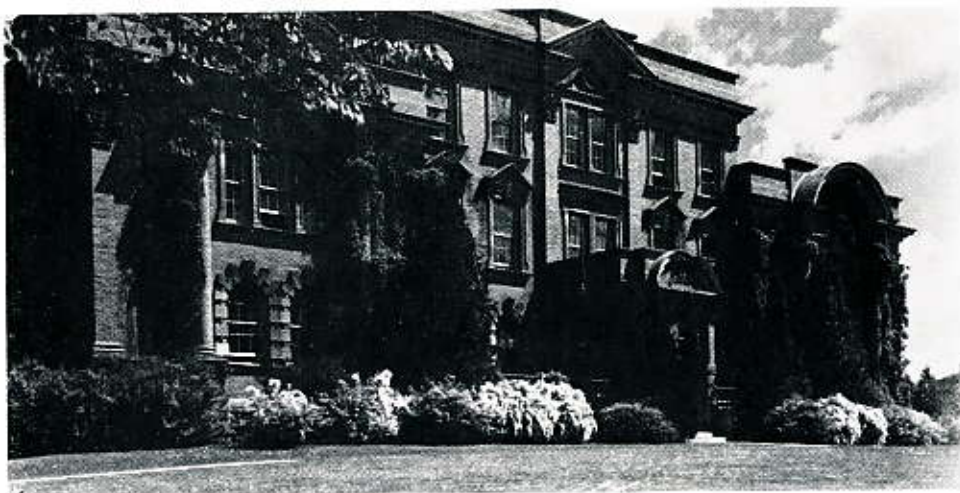
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- Report of Annual Meeting*
- Perception and Communication*
- 11th Congress — International
Federation of Home
Economics*



PARTICIPATION

Most appropriately this message appears under a picture taken at Macdonald Institute, Guelph University, fifteen of whose students attended the recent Home Economics College Club Conference held at the University of Manitoba. This is participation!

At the conference, the student representatives freely discuss the profession—its responsibilities and problems and its future. By encouraging the students to feel a part of the profession, we hope when they join our association, they will actively participate both in our development and that of Home Economics in general.

Many of our members, myself included, did not have the advantage of such a conference during their undergraduate days but a genuine sense of belonging quickly comes when one contributes to the advancement of an association.

During the coming years, many projects will be undertaken, the most important of which will be the planning for the future by the Professional Progress Committee. If asked to participate in any of these activities, do say yes, or, better still volunteer by giving your name to your Provincial Director.

With all best wishes for 1969.

Sally Henry

JOURNAL

EDITOR

MISS MARGARET C. SMITH
102 Airdrie Rd.
Toronto 17, Ont.

ASSOCIATE EDITOR

MRS. JANE SIMMS
33 Gaspé Road
Willowdale

FEATURE EDITORS

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Toronto 12

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CONTENTS

PARTICIPATION	2
PERCEPTION AND COMMUNICATION <i>John E. Ross</i>	3
MILIEU 70	6
EFFECTIVE USE OF THE OCEAN'S LIVING RESOURCES <i>Wilbert M. Chapman</i>	7
WHO'S WHO IN HOME ECONOMICS	14
REPORT OF ANNUAL MEETING, JULY 4, 1968	15
C.H.E.A. PRE-CONVENTION COURSE	17
NEWS ABOUT FOOD AND EQUIPMENT	18
A SINCERE WELCOME	20
BOOK REVIEWS	22
ABSTRACTS FROM CURRENT LITERATURE	24
TRENDS IN HOME ECONOMICS IN SCHOOLS IN MANITOBA <i>Helen Janzen</i>	27
HOME ECONOMICS IN THE SERVICE OF INTERNATIONAL CO-OPERATION <i>Wanda Young</i>	30
HAPPENINGS! HAPPENINGS! HAPPENINGS!	34
INTERNATIONAL CONGRESS <i>Margaret McCready</i>	37
HOME ECONOMICS REGISTRATION IN CANADIAN UNIVERSITIES	39
SHORT COURSE—UNIVERSITY OF SASKATCHEWAN	40

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Perception and Communication

DR. JOHN E. ROSS

*Professor of Agricultural Journalism
and Associate Director Institute for Environmental Studies
University of Wisconsin
Madison, Wisconsin*

An example of communication that has strong possibilities for perceptual ambiguity is as follows:

May 1 quote from an article in *Adult Education* of March 1968 titled "Conflict on Education for Women."

"Something is very wrong with the way American women are attending universities. The problem has lain buried, unspoken but felt, during recent years in the minds of educators and also perhaps in the minds of students.

"Ironically, the problem arises from the inherent conflict between women's equality with men and the 'female' role in society. These days, words like 'emancipation' and 'career' even sound strange and embarrassing to women. They think that the women's problem of equality no longer exists in America. More girls than ever secure higher education today. However, women's magazines and modern psychologists tell them how to catch a man and keep him, and how to dress, look, and act more feminine, how to make their marriage more exciting, and how to raise their children. Teenage girls are informed that truly feminine women do not want careers and higher education.

"How useful is higher education for women? Education should, and can, make a person 'broad in outlook, and open to new experience, independent and disciplined in thinking, deeply committed to some productive activity, possessed of convictions based on understanding of the world and on integration of personality.' However, the main barrier to such growth in girls is their own rigid preconception of woman's role.

"Such an impasse is revealed in this study, 'American College'. The study, which sampled 1,045 boys and 1,925 girls, reveals that boys succeed in college to be

independent, and to establish their identity in society through work. But a girl fails to achieve in college, or develop professional goals and skills there, because her identity is exclusively feminine.

"A trend becomes apparent with the mounting evidence. The 1966 national census showed that the proportion of women attending college in their senior classes in comparison to men, dropped from 47 per cent in 1950 to 30 per cent in 1966. Sixty per cent of the sample in the census dropped out of college to marry.

"Nobody argues that women are intellectually inferior to men. But most women, either highly educated or not, will ultimately be housewives. They would write proudly on the census blank: 'Occupation: housewife.' Many studies show in fact that unhappy married women frequently blame their education for their psychological dissatisfaction. Young women whose education plunged them in a world of ideas feel stifled in their homes. They find their routine lives out of joint with their training.

"At its worst, the enormous national investment in higher education for women contributes to their generalized dissatisfaction. At best, it provides only a marriage market place where a girl may locate her husband. Is this really the aim of higher education? Investment in higher education should be profitably used for the future of America. Let the American male continue to be the main breadwinner, so that American mothers may be the bread-bakers."

You might be interested in knowing the author of this article. There is no author. This is part of an article created to use as an experiment in a home economics class at the University of Wisconsin by one of our graduate students. We were interested in studying communication behaviour that occurred after a threatening message. We hypothesized that if the students perceived the message as threatening they would turn

Excerpts from an Address to the Canadian Home Economics Association, Biennial Convention, Regina, July 3, 1968.



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down a chance to gather additional information. This they did.

I think the article is grossly unfair. I am using this as an example of how perception can and does influence communication patterns. Communication is not free of emotional situations, and perception is part emotion.

I would like to use another example of perception. Several years ago we did a study of the functional orientation of women toward the mass media. We were interested in what the women felt they received from the mass media.

One of the research measurement techniques we used was a projection test. The women were shown a line drawing. They were told, "This woman is starting to read a newspaper. What do you think she will be getting out of it?" We were interested in answers oriented toward the use of the media. We did get some content oriented answers. But we received two other kinds of answers that we really didn't expect. One category was oriented toward the personality and dress of the woman. A second category was oriented toward how she was using her time in relation to her other duties. Clearly the projection technique worked.

The important thing is that perception is in the eye of the receiver. To understand communication we must include in our analysis the perceiver.

I would like to specify four ingredients of perception and how they are ranked in order of importance, that is, the first must work successfully for the second one to have a chance, and so on.

The first ingredient is sensory perception. We have certain organs through which we receive communication inputs. These organs give us the senses of sight, hearing, smell, taste, pain, balance. If we have poor vision, or if the light is not good then we cannot perceive. Sensory perception, in my opinion, is fundamentally important.

Second, we can look at comprehension. If a person has a poor understanding of the words or pictures we are trying to communicate, then he cannot perceive. Then we can look at grammar, at written construction, at the logic in our message as a tool for success or failure. There are two fundamental criteria for looking at

language and predicting comprehension. These are vocabulary burden and length. I can look at the burden of the message and at the sophistication of the audience and predict how much will be comprehended.

The third ingredient has to do with the individual's inner response to what he sees in the communication. With this category we get into the study of attitudes. Our analysis here gets more complicated because of the difficulty of measuring attitudes and because of the wide variation among individuals. But because of the potency of attitudes in forging response, we cannot ignore them.

My fourth ingredient is another level of attitudes. That is the attitude toward the source of information. We may achieve success at the sensory level, success at the comprehension level, the audience approves of the content, but questions the source of the information, and rejects the idea.

Let me give you an example. Suppose that we are concerned with getting information on credit buying in the hands of housewives. We check ourselves on sensory perception and on comprehension. Our message, we decide, is comprehensible. We also know that interest in the topic is high and that the particular solution we present is a rational one. Now, whether the information comes from a neutral source like an educational institution or from the money lenders can influence the credibility of the message even if the message itself is not changed.

Perception is a useful idea to think about in communication because it forces us to turn our attention to the audience and its characteristics, the receiving end of the communication system. We can look at the system itself to get some understanding of perception.

Early attempts at the study of communication considered it as a linear system, we have a source of information and a receiver. In between these two we can analyse the media that carry the message, the content of the message, and the treatment of the message. However, taken at face value, this approach to understanding perception in communication can be misleading.

We can make our study of the system a little more sophisticated and get at the problem. First, we need to recognize feedback as part of the process. In those situations where we are remote from the audience we ought to cultivate feedback. If we do this, we realize that communication is not linear but rather circular. It is not finite but continuing.

Second, we need to recognize the attributes of the communicator and the attributes of the audience and how these influence the communication process. We then realize that perception of the audience and perception of the communicator are important influences. It also tells us that the mood of both at the time of the communication is very important.

Communication content tends to flow through three kinds of networks: These are mass media, group media, and person-to-person. Each kind of system has some characteristics of its own. For example, mass media (radio, television, magazines, newspapers) are remote in distance from the audience and often remote in time. Their audience is dispersed and usually very heterogeneous. These characteristics shape the content that the media can carry and how that content is received.

The face to face communication network is an interesting one. It operates at two levels. The first is the informal exchange that occurs over a cup of coffee with friends or associates. The second is a secret or semi-secret network. Certain special kinds of information are made known to selected individuals through this network.

There are some characteristics of these communication networks that aid in our understanding of perception.

Facts and formal communication tend to flow through the mass media and to some extent through the group situations. Attitudes toward these facts tend to flow through informal face-to-face situations. Attitudes toward the source of information or about people tend to flow through the secret channels of communication.

Thus, if we as communicators are concerned about how our message is perceived we must account for not only the formal communication networks, but also the informal networks that are bonded to the formal ones. Acceptance or rejection of a

concept we are trying to put across often takes place at the informal level.

Perception is not apart from the situation in which communication exists. It is necessary to look at the nature of the problem we are trying to solve. It is also necessary to look at the ability of the audience to make the decision we are asking.

Some problems are relatively straightforward. For example we may be trying to instruct in a simple technical process. The directions are relatively easy. The ingredients are available. The cost is not high. We are not concerned with dealing with alternatives.

Some other problems are inherently complex. There are alternative solutions. Each of these solutions has some good and some bad aspects. These alternative solutions have ramifications beyond the point of decision. There is no easy way out, no simple yes or no.

Many of the problems which exist today, and home economics is no exception, are of the complicated type. The burden is upon the communicator to make the alternatives crystal clear. The burden is upon the educator to improve the facility of people to deal with the complicated problems. Perception is one tool we can use to measure our success. The final measure of success is the generation of action in our audiences.

This leading up the action on the part of audiences is what I call the "itch-scratch-sigh" formula. This might also be described as the "tension-action-relief" formula. In a little more detail it can be described as awareness of tension, awareness of alternatives to reduce tension, selection, trial, and adoption. Perception probably occurs all along this chain of events.

In this talk I really have said only three things. I have described how I see that perception is related to the process of communication. Second, I have suggested that perception on the part of the audience is very much a part of the situation as it exists, and third we can estimate how perception is working if we look at the action process.

I would like to end with some generalizations about how our message will be perceived.

Continued on page 26

"Milieu 70" —

Some Home Economists Should be There

Milieu 70, a conference to study the Impact of the Environment on Children, is being planned for October 25-29, 1970, in Winnipeg. The aim of the conference is to discover ways to provide an environment that will strengthen family living and meet adequately the needs of children and youth.

In preparation for this conference the Vanier Institute of the Family and the Canadian Council on Children and Youth are collaborating in a series of regional conferences during 1969. Each conference will include a combination of formal presentations by outstanding resource leaders and small discussion groups.

The first of these regional conferences will be held in Toronto, February 12-14, 1969, on the topic *The Educational Environment*.

The prolonged period of study before youth is meaningfully involved in the adult world, the emphasis on high academic standing and on post-secondary school education as the basis for future employment and the relevance of curriculum to such employment, are some of the issues to be considered. Also, to be discussed are: the problem of developing a democratic outlook in an authoritarian school setting; the pressures exerted on schools by parents, industry and government; and the influence on education of homes, communities and mass media.

The Cultural Environment will be the theme of the Prairie Conference to be held in Saskatoon, February 20-22, 1969.

This conference will explore the problems in a Multi-Cultural Society. What cultural values do we regard as important? How do we reconcile the cultural aspirations of minority groups with the hope for developing a Canadian identity? The conflict between generations of immigrants and the influence of language on culture will also be considered.

The British Columbia Conference to be held in New Westminster, February 27-March 1, 1969, will have as its theme, *The Physical Environment*.

The effect of the architectural environment and of the community structure (whether city, suburban or rural) on the development of children and on family life will be considered at this conference. How can we resolve the conflict between community planners and free enterprise? What impact do high density apartment living and crowded slum conditions have on child development? The need for play areas for children and recreational areas for youth and some measure of privacy for all ages are some of the problems to be discussed.

The fourth conference will take place in Montreal, April 24-26, 1969, when the *Political-Legal Environment* will be the theme.

This topic includes the division of responsibility for child care between family and state. What right has the state to interfere with the decisions within the family such as education, employment of children, even the size of the family? Since the child derives his initial attitudes towards law from the family, how can democratic ideals best be developed, respect for and observance of laws be instilled, and active involvement in government be fostered? The problems of delinquency and crime prevention as they relate to children, will also be discussed.

The Economic-Work Environment will be the topic at the Atlantic Conference which concludes the series. It takes place in Sackville, N.B. May 23-25, 1969.

An increased academic level is demanded of youth for employment even though the training seems to bear no relation to the requirements of their future work. Students are being asked to work harder and for longer hours while at the same time the labor force is demanding a shorter day.

The evident lack of satisfaction or significance in much of adult work life in a technological society makes young people reluctant to join the "establishment" and tends to give rise to the "Hippie" attitude. Varying levels of opportunity in different regions result in the mobile family and in

Continued on page 13

Effective Use of the Ocean's Living Resources

BY WILBERT M. CHAPMAN

(as published in May 1967 issue of *Food and the Future*)

Dr Wilbert M. Chapman is a recognized authority on world fishery matters. Since receiving his doctoral degree from the School of Fisheries, University of Washington, he has served as biologist and director of various commissions, boards and committees dealing with fisheries research and development in the United States. He currently is member, chairman or consultant to fourteen professional bodies including the Special Fund and the Food and Agricultural Organization of the United Nations, as well as the National Academy of Sciences. In his present capacity as Director, Division of Resources, Van Camp Sea Food Company, Dr Chapman is responsible for the application of Science and Technology to fishery development on a world-wide basis.

* * * * *

A good deal of thinking, and a good deal of writing, is being done just now at various industrial, academic, national and international levels in the world on the race between food production and population growth in protein malnutrition and the serious connotations it has to public health and to social and economic unrest in that two-thirds of the world called 'developing'.

At the same time there is an almost equal intellectual ferment in the same quarters about the ocean, how it is to be used better for the benefit of mankind, and the possible effect of this upon the human nutrition problem.

It will be my purpose this evening to examine these matters with a view to seeing what light can be shed on them from the viewpoint of an industrialist involved more or less world-wide in the fish business, a fishery scientist who has a casual knowledge of how the ocean runs, and a humanist who dabbles in governmental fishery and ocean affairs a good deal at the state, national, and international levels, has roamed around the world a good bit, and worries about these things.

Much of what I have to say will not sound very sensible to my hard-headed colleagues in the fish business in the Pacific Northwest who must worry steadily about returns on assets employed

in the relatively short term, as do we all in the fish business. Salmon and halibut have dominated fishery thought in the northwest in my lifetime, and that of my father before me. They have very little to do with what I will talk about. Taken together, they yielded from the Pacific in 1965 about 450,000 tons or about 1% of the world ocean fish yield. This would equal the yield of about two weeks' fishing for anchovy in Peru this spring.

Furthermore, salmon and halibut will decline in their relative importance to the human food problem as time goes forward. Under the very best conservation measures, it is doubtful if the sustainable yield from the Pacific of these two kinds of fish put together would much exceed a half million tons per year. Whether one takes the ocean food producing potential as being Schaefer's (1965) estimate of about 200 million tons per year, or that of Kasahara (1967) or mine (1967) of 2,000 million tons per year, or that of Schmitt's of 4,000 million tons per year, the irrelevance of salmon and halibut potential production to total human nutrition problems is evident.

What I will be talking about chiefly, and what will seem nonsensical to many of my industry colleagues, are those sorts of animals in the sea that are not used much, or at all, at the present time. The

reason they are not used is because a reasonable profit cannot be made in their production, processing and marketing. If I knew how to do this my company would be doing it instead of me talking about it. Accordingly, what I will talk about is what sorts of resources are available, how they might possibly be made use of, and some of the sorts of problems which keep them from being used fully now.

The Plants of the Ocean

Living matter is formed in the ocean as it is on land. Ocean plants, through the agency of chlorophyll, bind photic energy from the sun with inorganic chemicals dissolved in the water around them into larger molecules of the sort called "organic", and such of these as are digestible and useable by animals are called food. We do not know as much about these processes in the sea as we do on the land.

But the general thesis that food production in the ocean depends upon plants and is, therefore, restricted to the surface layer of the ocean where sunlight penetrates is sound enough for our present purpose. This photic layer may be only a few feet deep in very turbid water, or it may be as much as 1,200 feet deep in very clear tropical water, but perhaps as much as 65% of all living matter is produced in the upper 150 feet of the ocean, and the volume of the photic layer of the world ocean makes up not much more than 1% of the total water mass.

Ocean plants are of two main varieties, the multi-cellular kelps and algae (sea-weeds) and the microscopic one-celled plants called phytoplankton.

Some of the sea-weeds, like the sargasso-weed, are pelagic (float freely near the surface of the ocean), but most kinds are moored to the bottom and, because of their requirements for sunlight, live in relatively shallow water, say from depths of 100 feet or so to the intertidal zone, with the bulk of them being in the upper 50 feet. As abundant as they are around the edge of the ocean almost everywhere, they do not form a very big part of the total plant life of the ocean. Since they average pretty well, being annuals, their standing crop at any one time in the

ocean about equals their annual production. Bogorov (1965) has estimated this to be about 200 million tons per year for the whole world ocean.

The second, and main, type of ocean plant life is that composed of the single celled algae. These are mostly so small that they cannot be seen individually by the naked eye. They may be connected together in chains or other conformations, but for the most part these conglomerations, which may be only ephemeral, are also too small to be seen by the unaided eye. The great volume of these are free floating in the upper layer of the ocean, again because of the necessity for having sunlight. They do occur on the bottom on mud flats and other suitable habitats, but not very deeply below the ocean surface. The life of most of these single celled algae is measured in terms of a few days, or even hours. Accordingly, the annual production of these by the ocean is much greater than the volume of them (standing stock) existing at any one time. Bogorov (1965) estimates the standing stock of these one-celled plants in the ocean to average about 1.5 billion tons, and the annual production of them to average about 550 billion tons.

The relationship between biomass (standing stock) and productivity varies greatly, of course, with latitude, if only because of variation in available sunlight. In the tropics biomass is low in relation to productivity because production is going on every day of the year at about the same rate, whereas at high latitudes (for instance the Antarctic Seas) productivity may be enormous at the peak of summer and approximately nil in the dark of winter.

While the seaweeds of the shallow in-shore waters are much used by man at present, and are capable of much expanded use (including cultivation and regular aquiculture), their total volume and potential are modest in terms of world-wide need. There is no way of directly using the microscopic one-celled phytoplankton that form most the ocean's plant production, nor is any way foreseen at present (despite a good deal of talk about it). Even in their places of maximum production, where they may color the

water green, yellow, red or brown with their profusion, the weight of living matter per unit of water is so tiny that the cost of energy in separating the water from the living matter is greater by far than any value that the latter has.

The microscopic plant life of the ocean must be concentrated into bigger pieces before it can be practically harvested by man, and this is done by animals. Accordingly, the practical food production from the ocean consists of animal protein and edible oils, with small (but important) amounts of several vitamins, trace minerals, calcium salts, etc.

The upshot of this is that man must depend upon land production for the carbohydrate bulk of his diet, and probably for most of his edible fats. All he can expect in any considerable bulk from the ocean is animal protein and a good deal (but not enough) edible oil. This is no great misfortune, because this is just what the world human diet is most deficient in presently.

The Nutrition Problem

It helps me to think about the human nutrition problem if I over-simplify it in the following fashion:

Proteins (with water) are the essential ingredient which make the body work and compose it. Carbohydrates are mainly the fuel that provides bulk to the diet and energy to keep the engine running. Fats provide energy also, but perhaps their greatest food function is psychological—to help provide the tastes and flavors which make the proteins and carbohydrates fit to eat. Vitamins, minerals, and such odds and ends, are needed in small amounts to make skeleton and keep the engine working, but the big items are protein, carbohydrates and fats.

As you can plainly see by looking straight ahead, the human body converts carbohydrates it does not immediately need into fats and stores them away quite effectively against the day food intake slacks off below need. Some bodies do this a little more efficiently than others. On the other hand, the body does not store up excess proteins well at all. As they are used they must be replaced in

rather short order or the body sickens and dies.

Proteins are almost odorless, flavorless and usually colorless components of food that are not very attractive to the consumer. Foods which have a high content of good quality protein are desired by people because of taste and other characteristics given to them by other components, and among these other components the fats are important. Animal proteins in meat, fish, milk and eggs are highly attractive in most societies and bring high prices because of it, but this is not because the proteins themselves taste good. Even in subsistence economies legumes, (beans, lentils and peas) are often grown in preference to cereal or root crops that yield more calories per acre, but this is not because the proteins in them taste good—other components (and not carbohydrates) give the taste.

Proteins are used up by the body in the vital processes which are going on steadily while life exists. Since they are not stored very effectively they must be replaced almost as they are used. All proteins consist of about 20 different amino acids which the body uses as building blocks with which to construct the enormous variety of proteins (from brain cells to hair components) of which it is made. These amino acids must be obtained from food which the body eats. Of the 20 or so amino acids, man must obtain 8 pre-formed in his food at the rate he needs them because his body cannot synthesize them. The remainder can be made in the body from each other or from one of the 8 essential amino acids.

Some proteins contain an abundance of the essential amino acids; others contain one or more of the essential amino acids in less abundance than the body needs for healthy growth and maintenance. By and large, of the protein rich foods normally eaten by man (grass has a good balance of amino acids but is not much eaten by people) the animal proteins are well balanced as to the needs of the human body and most seeds (cereals, beans, peas, etc.) are deficient in one or more essential amino acids. It is possible to mix proteins which are deficient in different amino acids with each other in

proper proportion so that the mixture is well balanced for the human diet, or so that only a small amount of a fully balanced animal protein need be added to balance the whole.

Fish protein is particularly well suited for this purpose because it is well equipped with all of the essential amino acids and highly digestible. As a wag has said, fish proteins are better for people than bean proteins because people are built more like fish than like beans.

The Fishes of the Sea

It is an old saw that big fish eat small fish and are eaten by bigger fish, and so ad infinitum. Also, it is relatively correct. Each of the steps is called a trophic level by ecologists.

It is rather easy to understand this process on land. Antelope and cows eat grass almost entirely. Lions eat antelope and cows. There is a loss of ecological efficiency as you go up the scale. Very roughly speaking, if you start out with 100 tons of grass, you get 10 tons of antelope, and from 10 tons of antelope you get 1 ton of lions.

The situation in the ocean is incredibly more complex than this because there are so many more kinds of animal diets, and there is so much recycling of energy between life levels. Some fishes may eat only tiny animals when they are very young, and then eat tiny plants almost exclusively when a little older (anchovies), or very large animals (blue whales) may live on very tiny animals (krill), or fish (chinook salmon) may live on very tiny animals for most of their lives and switch to quite large fish (herring) as they become adult. Large fish stocks live in water much deeper than sunlight reaches and must depend ultimately for their food on what rains down from above, although it may be converted into quite different form by bacteria in the meantime, and be recycled two or three times yet before being used by the deep-sea fish.

Nevertheless, it is useful to give the following over simplified illustration, as crude as it may be:

Given 100 tons of phytoplankton off Peru, if all of this were eaten by anchovy

one might expect a yield of about 10 tons of anchovy. If these ten tons of anchovy were eaten by bonito, one might expect a yield of about 1 ton of bonito. If this 1 ton of bonito were eaten by tuna or shark, you might expect, from the original 100 tons of phytoplankton, a yield of about 200 pounds of either tuna or shark.

This sort of thing is why the world stocks of high level predators like tuna, shark, salmon, halibut, cod, etc., are quite limited in supply. It is also why there are so many of the herring-like and shrimp-like animals in the ocean that live off plants or on animals that do. It is why the one stock of anchovy off Peru produces from 8 to 9 million tons of landings per year, as against world landings of all kinds of tunas of only about 1 million tons per year. The closer the animal you are catching is on the food chain to the phytoplankton, the more of them there are likely to be.

Traditional and Untraditional Fish

You will recall that most of the fish you eat directly (salmon, halibut, flounder, cod, haddock, etc.) are 10 inches or longer in size. You may also know that the greatest expansion in use of fish from the sea since the last war has been for making fish meal with which to feed chickens, pigs, etc. The kinds of fish used for making fish meal are mostly in the size range 5 to 10 inches long. The great bulk of animals (fish and otherwise) in the ocean are smaller than 5 inches in length. It is from this great bulk of small animals in the ocean that the great bulk of animal protein from the ocean is to come in the future.

Fish are eaten directly because they taste, smell or look attractive on your plate. The main difference between the marine animals that support traditional fisheries and those which are underutilized is that the traditional fish can be got to the consumer in a form that is attractive to him at a price he can afford, and the untraditional fish cannot. This classification changes steadily as improved technology lowers the cost of production, processing and distribution or improves the value of the end product, bringing new sorts of fish into the used category.

Flavor, fragrance and texture are delicate qualities in fish that are subject to rapid change after death and are difficult and costly to preserve. Only fishermen and dwellers near the seashore, ordinarily, can have fish with these pristine qualities intact. All preservation of fish designed to store them against later usage, or for transportation to distant consumers, adds cost to the product and changes one or more of these desirable original characteristics. This is true whether the fish are chilled, frozen, irradiated, canned, pickled, salted, dried or fermented.

Flavor, fragrance, and texture are the expensive attributes of fish. Very fresh bluefin tuna, which is to be eaten raw as sashimi, brings the Japanese fisherman at least \$2,000 per ton on the Tokyo market ordinarily, and this price may go above \$3,000 per ton toward the holiday season of year end. \$1,000 per ton is not exceptional as a price for first quality troll salmon, or shrimp, or lobster, or oysters, or even halibut in some years. Fish which are going to be consumed from the canned, frozen, salted, dried or other preserved form, however, do not require the same care and freshness because their flavor, fragrance and texture qualities are going to be changed in the preservation processing any way. Accordingly, these do not cost the fishermen so much to catch and land and they can be had more cheaply.

On the other hand, if protein is what is being sold, and the taste or form of the product is to be suited to other than human consumers, then taste, texture, etc., can be suited to the desires for these non-human consumers. For instance, cats do not care much about the form or texture of the fish they get, but they are sticklers about freshness of original raw material. On the other hand, chickens have rather wide tolerance as to flavor, fragrance and texture. They are fed fish almost solely for the purpose of providing them the protein needed for healthy growth, production, and life. They get fish meal and the fisherman can produce fish for a product of this quality at costs ranging from \$10 to \$30 per ton in different parts of the world.

From the standpoint of nutritional quality and value—that is, the amino-acid bal-

ance of the protein as viewed against the needs of the animal's nutrition (human or otherwise), the proteins of all fish are substantially the same. The nutritional value of the tuna that brought the Japanese fisherman \$3,000 per ton on the Tokyo market is approximately the same as that of the anchovy that brought the Peruvian fisherman \$15 per ton at the fish meal plant in Callao.

The other point to be kept in mind is that, by and large, big animals are easier to keep in good condition between catching and landing than small animals. A big halibut, or salmon, cod, or tuna just does not smash up, break, or otherwise deteriorate as rapidly aboard vessel as does an anchovy, sand lance or smelt.

Also, some animals lend themselves to certain forms of preservation better than others. For instance, fat fish like spring chinook salmon or black cod do not make a good dried product because the body oils in the flesh become rancid during storage and do not taste or smell good. On the other hand, lean fish like cod make excellent dried or salted fish and this was their chief commercial market until freezing at sea became more common. But the lean cod fish do not make a very tasty canned product, and salmon do because the salmon body oils are very tasty if they are kept from becoming rancid. Again, hake do not make as handy a fish for frozen fillets as cod, or cod as ocean perch, because the 'drip' upon thawing is more difficult and costly to prevent.

Lastly, one must consider the cost of transport and distribution to market. This controls the whole character of fisheries in particular areas. In ocean areas distant from market only those animals that can be got to the consumer in a form he likes, at prices he can pay, are fished for. The others are discarded and not landed. This is the reason that salmon and halibut became the mainstay of the North Pacific fisheries over the past century and pollack, ocean perch, and smaller flat fish were not much caught. The value of the salmon and halibut to the ultimate consumer, often far away, was enough to cover cost and profit to fisherman, processor and distributors; for the others it was not.

The reason why the anchovy fishery of Peru and Chile, and the sardine and anchovy fisheries of South Africa, have developed sharply to produce fish meal for the European and North American market in recent years is that the cost of catching the fish to that market's specifications, of processing it to that market's needs, and of shipping the dried and partially de-fatted fish meal were all cheap, so that the value of the product (mostly in the protein) to the consumer (mostly chickens) was still high enough to cover the cost and profits of fishermen, processor and distributor.

Fish Meal Production

The great growth of world-ocean fish production since the end of World War II has been for fish meal and solubles for livestock (chiefly poultry) feeding. Production of fish meals and solubles from all sources was about 617,000 metric tons in 1948; 1,501,000 tons in 1958, and 3,694,000 tons in 1965 (FAO 1966b). It was probably about 4 million tons in 1966. Translated into round weight of fish at 5.5 tons of fish per ton of meal, this amounts to about 1,400,000 metric tons of round fish in 1948; 3,250,000 tons in 1958; 20,300,000 tons in 1965, and about 22 million tons of round fish in 1966 (or very close to half of the fish produced from the world ocean in 1966). Nearly all of this increase in the catching of fish for fish meal production (an increase by a factor of about 15 in 18 years) came from the herring-like fishes (anchovy, pilchard, sardinella, and herring), which being close to the phytoplankton in the ocean food chain, are the abundant sorts of fish in the ocean.

It is likely that the use of this sort of fish for fish meal will continue to expand for some time to come yet. There are large known stocks of these sorts of fish that are not fully utilized yet, and many that are hardly utilized at all, in several parts of the world ocean. Modern poultry raising is spreading rather rapidly in the developing world now, and still expanding in the industrialized countries, assuring a continued expanding market for fish meal so long as it is kept at a price

level and quality level so that a small percentage of it in the poultry diet (say 3% to 7%) produces increased production in the poultry valued at more than the cost of the fish meal, or of any substitute providing similar effects. At present, under these conditions, the market (although it gets over supplied temporarily, as now) seems to be almost insatiable.

The reason is that as disposable income gets up in any society the demand for animal protein in the human diet increases, and poultry is acceptable in the diet of almost all societies. Improved technology in competitive products designed to replace fish meal in poultry feeds may change this picture because feed mixes are formulated by computers now to attain greatest performance for least cost from any combination of ingredients, but the present market for fish meal still looks strong.

World Food Deficit, 1970

It is necessary to differentiate need from demand for protein in the world human diet for the reason that demand always outruns need in affluent societies, or even in reasonably prosperous societies, while demand always understates need in poor societies. The U.S. Department of Agriculture (1964) made a projection of the world food deficit for 1970 which, for this reason, has some critics but is still as good as any such study I know of, and the following statements are based on that.

About two-thirds of the world's people live in countries with nutritionally inadequate national diets. The diet-deficit areas include all of Asia except Japan and Israel, all but the southern tip of Africa, the northern part of South America, and almost all of Central America and the Caribbean.

World population exceeded 3.0 billion people in the period 1959-61 and will exceed 3.6 billion in 1970. During the 1960 decade, world demand was projected to increase more rapidly than population. By 1970 it was expected that the calorie level of intake would have increased by 8% above the base period (1959-61) and that consumption of pro-

tein and fat would be up 10% and 11% respectively, thus indicating an improvement in quality as well as quantity of food per person.

A world food deficit will continue to exist in 1970. The expected calorie gap will be the equivalent of 54 million tons of grain. The deficit in animal protein will likely be equivalent to 6.5 million tons of non-fat dry milk or 3.0 million tons of fish protein concentrate. In addition the equivalent of 3.2 million tons of soy grits will be required to fill the deficit for pulses and other protein sources. To fill the fat deficit will require the equivalent of 3.1 million tons of vegetable oils. The total cost of filling the world food deficit in 1970 was projected to be about \$6.8 billion, which would be about one-third less than was the case in the base period of 1959-61.

Fish Protein Concentrate

The above study, even if somewhat rough, gives some dimension to the world protein deficit for human nutritional purposes. Soy grits and other pulse sources of edible protein are all short of one or more essential amino-acids and can be substituted for by somewhat less equivalent weights of fish proteins to achieve equivalent, or better, nutritional results. Accordingly, a total of 7 million tons of fish protein concentrate would fill the 1970 world protein deficit. If one converts this to terms of round fish weight at 5.5 tons of fish per ton of meal, somewhat less than 40 million tons of new fish per year would fill the deficit. It would also, at the same time, fill a rather large part of the edible oil deficit.

I do not know of any expert who thinks that the fish production from the world ocean cannot be increased by 40 million tons per year, on a sustainable basis, without any new technologies, on the basis of what is known now, and from wild stocks of fish, so long as the smaller fishes low on the food chain can be used (as for fish meal). Schaefer (1965), the most conservative of the experts who has recently examined this problem, estimates the production capabilities of the world ocean under these conditions to be four or five times what it is now, or at

least 200 million tons per year, on a sustainable basis.

One then comes to the problem of producing a de-fatted dehydrated fish product from almost any whole fish source. Such a product brought to about 10% moisture content, and half a percent fat content, is approximately colorless, tasteless and odorless. It is somewhat more than 80% animal protein and the remainder of its solid matter is mostly nutritious and digestible (calcium, trace minerals, vitamins, etc.) which add something to the nutritional value of the product.

"MILIEU 70"

Continued from page 6

children leaving home at an early age in search of work. How can we reconcile the existence of poverty in an affluent society? These are some of the problems which will be dealt with at this conference.

At the end of each regional conference the Directors and Provincial Committees of the two sponsoring organizations will evaluate the findings and select the major issues to be included in the program of the National Conference in 1970.

As many home economists (or their agencies) as possible, those who are involved particularly in community work and teaching should make enquiries regarding the contact they should make locally if interested in partaking in one of the regional conferences.

Write direct to:

DR. MARGERY E. KING,
Canadian Council on Children
and Youth,
165 Bloor St. East, Suite 302,
Toronto 5, Ontario.

In humans, lack of ascorbic acid in the mother's diet may result in premature birth.

Lack of folic acid, and others, also result in deformations.

(Nutrition of the Embryo, Giroud, Federation Proceedings, 27: No. 1, Jan.-Feb. 1968. p. 163-184.)

Who's Who In Home Economics



Miss Mary Broadley
B.H.Sc.

Miss Mary Broadley, the newly elected secretary of our Canadian Home Economics Association for 1968-1970, is a native of England.

After attending elementary school in England and in Toronto, Miss Broadley completed her secondary school education at the Western Technical and Commercial School in Toronto. Further study at the University of Toronto led to a Bachelor of Household Science degree. Interest in a teaching career then took her to the Ontario College of Education where she was successful in obtaining a Specialist Teaching Certificate in Home Economics.

Since graduation, Miss Broadley has had a busy professional life teaching Home Economics at the secondary level in Ontario schools.

Our secretary takes an active part in the Toronto Home Economics Association and is at present the chairman of its Scholarship Committee. She is also the treasurer of the Home Economics Section of the Ontario Educational Association. In addition to these responsibilities, Miss Broadley has taken on the position of secretary of our National Association because she thinks, "Everyone should take her turn at helping her professional association."

Interest in out-of-door sports takes Miss Broadley out on the golf course in summer and on the ice skating rink in winter.



Mrs. D. B. Rankin
B.Sc. (Home Economics)

The new Treasurer of our Association, Mrs. D. B. Rankin (nee Dumont), was born in Campbellton, New Brunswick. After obtaining a primary and a secondary school education at the Ursulines Nuns' Convent in Rimouski, Quebec, she attended Laval University, Quebec City, where she graduated with a Bachelor of Science degree in Home Economics. She then went back to the Maritimes for a Dietetic Internship, taking her course at the Victoria General Hospital, Halifax, Nova Scotia.

Louise Rankin was the Home Economics "Consumer Consultant" with the Department of Fisheries for five years, and during this time she did considerable testing of fish recipes. She has also lived in Montreal for five years holding the position of regional home economist for the province of Quebec. She plans to return to the professional job of food promotion as soon as her family responsibilities permit. At the moment, being the mother of two young sons (one just a young infant), keeps her busy at home.

Mrs. Rankin's previous experiences, as the former treasurer for the Corporation of Dietitians of Quebec for one year and as the membership and nominating chairman of the Montreal Home Economics Association for two years, have given her an excellent background for her present position with C.H.E.A. She is presently very much concerned with the spiraling cost of living and thinks that, "A greater emphasis

Continued on page 29

Report of the Annual Meeting of the Canadian Home Economics Association Regina, Saskatchewan, July 4, 1968

The president, Miss Wanda Young, called the meeting to order at 2.10 p.m. and welcomed members to the 1968 Annual Meeting of the Canadian Home Economics Association.

MOTIONS PASSED AT THE ANNUAL MEETING:—

1. Moved that the information obtained in the forthcoming Salary Survey to be conducted by C.H.E.A. be made available to all affiliated associations.

2. Moved that a committee be formed to initiate a survey of members of C.H.E.A. to investigate what publications in home economics and related fields, currently unavailable, would be considered desirable for reference or reprinting.

3. Moved that C.H.E.A. establish a professional code of Ethics as requested by the College Clubs Convention, November 1967.

4. Moved that C.H.E.A. set up a professional development committee.

5. Moved that the "Fellow" committee report be accepted, but that the report be returned to the committee for a review of the objectives of the award in order to differentiate these clearly from the objectives of the Honorary Life Membership and the Honorary Membership.

6. Moved the resolution regarding labelling and dangerously flammable fabrics be referred to the Textiles and Clothing Committee.

7. Moved that special appreciation be expressed to Dr. Simpson and her staff for the excellent way in which the Workshop was conducted, and to the University of Saskatchewan for providing the facilities and staff assistance.

8. Moved that the C.H.E.A.—C.D.A. Liaison Committee be dissolved.

9. Moved that a joint ad hoc committee be appointed to once again look into the Vo-

educational Guidance and Public Relations activities with a view to prevent unnecessary duplication by the two national associations, Canadian Dietetic Association and the Canadian Home Economics Association.

10. Moved that C.H.E.A. endorse and commend the action of the College Clubs in adopting a ring, of yellow gold to denote the warmth of home and family; with a shank with many facets representing the many facets of home economics; to be worn on the fourth finger of the right hand; to be available to all graduates of Home Economics from Canadian universities, as the symbol of the professional home economist in Canada.

11. Moved that the application form for the Home Economics ring be held in the C.H.E.A. National office, obtainable upon request by Home Economics graduates from Canadian universities.

12. Moved that the Executive review all requests for waiving membership fees for students working for advanced degrees (Master's or Ph.D.), an information form to be sent to the candidate from National office.

13. Moved to investigate the possibility of consolidating fee collection from the various local and provincial organizations with the objective of increasing local, provincial and national membership.

14. Moved that for convenience, the Canadian Home Economics Journal Committee be empowered to investigate the cost of printing the magazine in Toronto, and to select the most suitable printer for publishing, and further that a letter of appreciation for many years' co-operation be sent to Public Press Ltd., Winnipeg.

15. Moved that the C.H.E.A. Membership Directory be disassociated from advertising

in the Journal and be sold for \$100 to non-members requesting it.

16. Moved that the C.H.E. Journal subscription per year be increased to \$4.00 for 4 issues, and that efforts be made to increase the number of articles of professional interest as well as continuing a good coverage of personal and organizational news items of country wide interest. This increase to be effective immediately on new subscriptions and renewals.

17. Moved that C.H.E.A. investigate an exchange of copies of the C.H.E. Journal and Forecast magazine.

18. Moved that the C.H.E.A. grant to the C.H.E. Journal be increased to \$600.00 per issue, effective the October 1968 issue.

19. Moved that the registration fee for delegate to attend the National Human Rights Conference in Ottawa, December 1-3, 1968 be paid.

20. Moved that the C.H.E.A. affiliate with the Canadian Welfare Council.

21. Moved that C.H.E.A. apply for membership in the Family Planning Federation of Canada, annual fee of \$10.00.

22. Moved that the C.H.E.A. pay for 5 collective memberships in I.F.H.E. for 1969.

23. Moved that a maximum of \$50.00 be allocated from C.H.E.A. funds for a Canadian Alumnae reunion in Boston during the 1969 A.H.E.A. Convention at the time of the alumnae reception.

24. Moved that C.H.E.A. make available an amount not exceeding \$200.00 to cover expenses of the C.H.E.A. President to attend the College Clubs conference in the fall 1968.

NOTICE OF MOTION

By-Law XIII—Executive Committee

Miss Bailey moved that this By-Law be amended by deleting the word "six" and substituting the word "eight" and that the amended By-Law should read as follows:

The Board of Directors shall at their meeting held immediately after the annual general meeting of members and from time to time as vacancies occur, appoint at least four and not more than eight of their body as an executive committee of which the President shall also be a member and the following provisions shall apply thereto:

Seconded by Miss Sally Henry. Carried.

By-Law XIX—Finance

Miss Bailey moved that the present By-Law XIX—3—Auditor become By-Law XIX 4 and that the present By-Law XIX—4—Remuneration of Directors, Officers, Agents and Employees become By-Law XIX 5 and that a new By-Law be introduced.

By-Law XIX—3—Scholarship Fund

a) The permanent scholarship fund shall be for the purpose of awarding scholarships for graduate work in matters relating to the objectives of home economics. All monies collected for this purpose are to be deposited with the Montreal Trust "in perpetuity" and the interest shall be used either to increase the capital investment, or when large enough, to award scholarships.

b) The Scholarship Fund committee shall consist of the President, Vice-President, Secretary and the Comptroller of the Scholarship Fund, such committee to be designated as the "Charitable Organization" required by the Department of National Revenue in connection with the exemption of donations for income tax purposes.

c) The Comptroller of the Scholarship Fund shall be appointed by the Executive for a period of five years, which may be followed by reappointment for a further period of five years. The Comptroller shall be responsible for receiving all contributions, making bank deposits, transferring of funds to the investors and issuing official receipts.

Seconded by Miss Mabel Patrick.

It was moved by Miss Bailey that we amend the proposed amendment of By-Law XIX—3 Scholarship Fund by deleting the words "The Montreal Trust" and inserting the words "a trust company."

Seconded by Mrs. Louise Seaman. Mrs. S. K. Watson questioned the legality of the change. This will be investigated. Carried.

The motion as amended carried.

A piece of work may be tested by three questions: (1) does it please the person who did it? (2) does it satisfy the person for whom it was done? (3) does it accomplish the purpose for which it was done? If these can be answered "yes" the job has added grace to the doer, the recipient and the work.

C.H.E.A.—Pre-Convention Course

June 27-June 29, 1968

Modern Communication in Home Economics

"This will be an experience in total communication," said Dean Edith Simpson, opening the 1968 Pre-Convention Workshop in Communications. For the sixty Home Economists, (increased from the original 50 students because of the heavy number of applications), the workshop indeed fulfilled Dean Simpson's promise.

The two and one-half day workshop at the Saskatoon Campus of the University of Saskatchewan was organized by Dean Simpson and her Home Economics staff, and the University's brand new Division of Audio Visual Services. It was attended by home economists from every province representing the fields of business, teaching, extension and government services.

The class was divided into five groups of 12 students with each group attending five different three-hour workshops, plus several special lectures.

Emphasis in each workshop was placed on understanding the principles and learning facility with that particular communications medium. Each student was expected to experiment and create with the various media according to her professional situation.

In the television workshop, students learned to operate basic closed circuit television equipment including master controls and individual cameras. After learning sufficient technical data, each group produced one short taped television presentation, including such topics as pressing techniques or simple food preparation.

Similarly, in the photography workshop, cameras, lighting equipment and techniques, and light meter equipment were demonstrated. Then, using any of the prop material on hand, pairs of students arranged and took their own photographs suitable for class-room instruction. As well, the technique of using the camera for preparing transparencies was also taught.

The graphics workshop showed the use

of equipment designed to make material for overhead projectors. Some instruction was also given on design and construction and lettering of graphic (permanent visual), material for television and class-room use.

Movie-making or cinematography was one other important workshop. Here, students learned the operation of the 8 mm movie camera, how to set up lighting and how to produce and direct a single concept movie for demonstration or instruction purposes.

Finally, in the projection workshop, pairs of students became totally familiar with the operation and maintenance of movie projectors, slide projectors, overhead projectors, film strip projectors and tape recorders.

Throughout the course, special lectures were given by communication experts. These included, "The Use of Media in Teaching Situations", "The Availability and Types of Audio-Visual Materials", "The Design of Lecture Presentations and Showmanship" and "The Selection of Films for Instructional Purposes".

The 1968 Pre-Convention Workshop was rated an unqualified success. Special thanks go to Dean Simpson, Dr. P. R. Greenough, Director, Division of A-V Services and the planning committee.

All Home Economists who attended agreed that during the information-crammed days, they received a thorough introduction and new insight into the basic media used in modern communication methods for Home Economics.

BONNIE CORNELL

*Ontario Department of Agriculture
and Food, Toronto*

Re-Greening—The skin of a ripe, unpicked Valencia orange, unlike that of a Navel, can turn partially green after developing the conventional orange color. It happens every year and is of concern to citrus growers because consumers reject them, although they are just as sweet.

NEWS — About FOOD and EQUIPMENT

Casserole Bases—a new way to use leftovers

Thomas J. Lipton Limited, Toronto, Ont., has completed the national distribution of their new Casserole Base dinners with the recent introduction of the products in Quebec and the Maritimes. The line consists of three varieties—Stroganoff, Tetrazzini and Mornay—with each having a suggested retail price of 59¢. Casserole Bases can be easily prepared in a one-pot, one-step method by simply adding water and cooked meat, poultry or seafood to the package ingredients (noodles, sauce, garnish). Cooking time is 20 minutes, making a main-dish serving large enough for 3 to 4 adults.

Nabisco Invests in Future Development

A \$1,250,000 expenditure to install new equipment in its Niagara Falls plant has been made by Nabisco Foods, Division of Nabisco Ltd. This new 'extruding' equipment gives them a tremendous flexibility for future development. The 'extruding' process allows them to produce cereals in a wide variety of shapes and sizes, simply by changing a die. Nabisco's first extruded-type cereal, Kondike Pete's Golden Nuggets, is currently being test-marketed in British Columbia. The new honey graham cereal is pre-sweetened. In addition, Nabisco is currently test-marketing, in Canada, two other new products: Rice Cream Flakes—a rice flake cereal coated with freeze-dried ice cream; and Snack Mate Spread—a cheese-flavoured spread in a pressurized can — available in three flavours: Cheddar, Cheddar and Pimento, and Pizza.

Amaze

Amaze contains proteolytic enzymes which have been specially designed to operate in the temperature and pH ranges normally encountered in domestic laundering. These enzymes function in a similar manner to all proteolytic enzymes, i.e. they have the capability of attacking the peptide linkages in the protein molecule thereby breaking the molecule down to amino acids and short chain soluble polypeptides which

can be easily flushed away in the detergent solution. Many of the problem stains encountered in laundering are bound to the fabric by protein, e.g., blood, egg, milk, meat gravy, baby food, etc. The action of the enzymes is specific to such stains. The enzymes in Amaze are incorporated into a carefully formulated detergent base which contains surfactant, sequestering agent and brightener which boosts the overall efficiency of the laundry product when used as an additive. In a soaking operation the detergent base can effectively cope with many of the non-protein type stains. The detergent ingredients in Amaze are completely safe for all fabrics. The enzymes can attack the protein fibres *wool* and *silk* and consequently the product is *not recommended for use on these fibres*. Occasional use of Amaze on wool shows no deleterious effect but with long soak times or frequent usage fibre degradation can occur. Suggested retail price: 12 oz. pack 59¢; 24-oz. pack 99¢.

Pouched Milk

Ideal Dairies Ltd. of Oshawa, Ont., has become the first Ontario dairy to package milk in film pouches. Homogenized and 2% milk in 3-qt. units are going into pouches for sale in stores and to home delivery customers. Called "Pitcher-Pak"—three 1-qt. pouches are packaged in an outer bag of "Sclairfilm" polyolefin film, with each individual pouch fitting into a specially designed plastic pitcher, sold by the dairy at a nominal cost—the system uses a "Prepac" form-and-fill machine installed by Du Pont of Canada. Price of Pitcher-Pak is slightly higher than the jug at the store. However, it may be lower than the 3-qt. carton in home delivery once Ontario County prices settle. Ideal Dairies' managing director, Wilfred Pascoe, says the company hopes eventually to discontinue use of the 3-qt. jug. Du Pont introduced the system in Canada two years ago. Two Quebec dairies—Laiterie Belle Vallee, of Valleyfield, and Laiterie Laval, of Quebec City — adopted the system. The Valleyfield machine has been operating for more than a year.

New Frozen Fruit Pies Developed in Canada

A new line of frozen fruit pies by Kitchens of Sara Lee (Canada) Ltd., the result of 12 months' intensive development, use first grade fresh creamery butter in their pie-crust formula, making possible a more tender and flaky crust. The fruit fillings are made with a high proportion of fruit to juice, and this approach to the filling formula helps retain the tender flakiness of the crust. The pies, complete and ready for baking in the home oven, are being introduced initially in three different fruit varieties—apple, blueberry and cherry. Crisp, juicy Jonathan apples are used in the apple pies, since research has shown that they retain their fine flavour and other characteristics to a greater degree than other apples in the freezing process. The fruit for the other two new pie varieties comes from famous Canadian sources—the blueberries from Nova Scotia and the cherries from the Niagara Peninsula.

New Good Luck

Research has shown that margarine users rate ease of spreading one of the most important things they look for in a margarine. Until now, consumers wishing to get the best in spreadability have had to buy soft margarine in a tub; but these margarines are in general considerably more expensive than regular "stick" margarines. New Good Luck overcomes this disadvantage and is the first regular stick margarine specially formulated to spread easily, even at refrigerator compartment temperatures. The secret is in the blending of the oils. Lever Bros. have discovered how to use two basic blends in such a way as to produce the best combination of taste and spreadability. The new margarine has been extremely successful in consumer tests and is now available in the Maritimes, Ontario and British Columbia, and will soon be available in the rest of Canada, with the exception of Quebec.

Luncheon Meat

Bovril (Canada) Ltd. now have in most major chains and independent stores a 2-lb. can of Luncheon Meat. Packed in Denmark and of an excellent quality, it retails for 99¢ to \$1.09 per can.

Instant Hot Water

That's exactly what you get—water from 150° to 190°—from the latest gadget invented by Hobart, called Instant Hot water dispenser. It can be installed beside the taps of your kitchen sink. The unit consists of a gleaming chrome rinser and spout above the sink and underneath, a neat small tank that holds 2½ quarts of water. It operates on 1000 watts and adds but little to your hydro bill. It saves time and effort in the preparation of instant foods, frozen foods, jelly powders and hot beverages. It's a great boon, also, for warming baby bottles, loosening tight caps of bottles, peeling tomatoes and making gravy. Suggested list price is \$109.50.



Domestic—Sunflower Seed Oil

For the first time in Canada, a cooking oil has been introduced in a breakage resistant plastic bottle. The new plastic bottles in main consumer sizes of 16 oz., 24 oz., and 32 oz., as well as in a fourth giant size

Continued on page 21

A Sincere Welcome . . .

To these new members who joined C.H.E.A. from August 1968 to October 1968:

British Columbia

Ackhurst, Mrs. P. W., 313-6th St. S., Cranbrook — Teacher, Senior Secondary School, Kimberley — 1968 Graduate.

Alberta

Casselman, Mrs. Harold, 2207 Victoria Cres. N.W., Calgary — Teacher, Crescent Heights High School.

Gilfillan, Mrs. Caroline, 7623-70 Ave., Edmonton — Home Management Consultant, Family Service Association.

Hutton, Mrs. J. S., 402 Vanier House, Michener Park, Edmonton — Student — 1968 Graduate.

Hunter, Miss Sheila, 770-6th St. S.W., Medicine Hat — Dept. Agriculture District Home Economist — 1968 Graduate.

McKay, Mrs. W. N., 6735 Leeson Crt. S.W., Calgary, Alta. — Consumer Information CBC, Lecturer Adult Education.

Mullen, Mrs. R. P., 20 Marlboro Rd., Edmonton — Homemaker (Reinstated).

Saskatchewan

Ashton, Mrs. Margaret A., Circle R Ranch, Highway 5, Saskatoon — Homemaker — 1968 Graduate.

Hennig, Mrs. Brenda, 174 Peaker Ave., Yorkton — Office Manager, Midwest Packers Limited — 1968 Graduate.

Lee, Miss Eva, 10-1909-7th St. E., Saskatoon — Assistant Professor in Nutrition, University of Saskatchewan.

Osinski, Miss Joanne — Teacher, Department Indian Affairs and Northern Development.

Parker, Miss Dianne J., 2233 Haultain Ave., Saskatoon — Educational Representative for Lightning Fasteners — 1968 Graduate.

Potts, Miss Carol M., 7-4049 Retallack St., Regina — Nutritionist, Regina Rural Health Region.

Smith, Mrs. Elizabeth J., 3039 Quinn Dr., Regina — Teacher, Sheldon Williams Collegiate.

Smith, Mrs. Jean C., Box 239, Moosomin — Homemaker.

Smithwhite, Miss Ruby, 1-1600 Alexandra St., Regina — Student.

Manitoba

Foster, Miss Lynda D., Box 370, Swan River — Dept. Agriculture, Extension Home Economist — 1968 Graduate.

Puznicki, Miss Louise C., 31 Brisbane Ave., Winnipeg — Student — 1968 Graduate.

Ontario

Aylen, Miss Ena F., D110 Pointe Claire Apts., Petawawa — High School Teacher — 1968 Graduate.

Coggins, Mrs. Chère S., Kemptville College, Kemptville — Lecturer.

Cornelius, Miss Cathryn, 40-193 Queen St., Sarnia — Teacher, Sarnia Collegiate Institute — 1968 Graduate.

Court, Mrs. B. Ann, 1413 Glenburnie Rd., Port Credit — Teacher.

Demeter, Mrs. Marjorie, 209 Old Yonge St., Willowdale — Teacher (Reinstated).

Foley, Miss Anita A., Dept. Home Economics, University of Windsor, Windsor — Lecturer.

Gordius, Mrs. E. W., 51-207 Waterford Dr., Weston — (Reinstated) Teacher.

Hepburn, Miss Donna, Box 460, Perth — Home Economist, Lanark County — 1968 Graduate.

Hiller, Miss Gail F., Box 644, Kemptville — Lecturer Kemptville College of Agricultural Technology — 1968 Graduate.

Johnson, Miss Patricia L., 5 Ralph St., Ottawa 1 — Technician, Animal Research Institute — 1968 Graduate.

LaRouche, Miss Camillia, 872 Adelaide St., London — Teacher, Sarnia C.I. & T.C. — 1968 Graduate.

Letcher, Mrs. N., 240 Rita Rd., North Bay — Assistant Master, Cambrian College (Reinstated).

MacDonald, Miss Kathleen, Nurses' Residence, St. Michael's Hospital, 38 Shuter St., Toronto 2 — Dietetic Intern — 1968 Graduate.

MacGregor, Mrs. Margery, 145 Stone St., Gananoque — High School Teacher — 1968 Graduate.

Maskow, Miss May L., Ryerson Polytechnical Institute, 50 Gould St., Toronto 2 — Instructor.

Matthews, Miss Linda, University of Windsor, Windsor — Lecturer.

McDonagh, Miss Sheila M., Toronto Western Hospital, 4 Leonard Ave., Toronto 2B — Dietetic Interne — 1968 Graduate.

Milligan, Miss Mary L., Box 210, Front St., Emo—Home Economist, Ontario Dept. Agriculture and Foods — 1968 Graduate.

Pelton, Mrs. W. R., 307-689 Woolwich St., Guelph — High School Teacher.

Schultz, Miss Lois R., Centralia College of Agricultural Technology, Huron Park P.O. — Instructress — 1968 Graduate.

Selby, Mrs. Anne, Ryerson Polytechnical Institute, 50 Gould St., Toronto 2 — Course Director Foods and Nutrition.

Shankhla, Mrs. Astrid, Macdonald Institute, University of Guelph, Guelph — Graduate Student Home Management.

Simms, Mrs. Jane, Consumers' Gas Co., 19 Toronto St., Toronto 1 — Assistant Home Service Director.

Simmons, Mrs. Anne, St. Joseph's Hospital, 80 Westmount, Guelph — Director of Dietetics (Reinstated).

Smith, Mrs. John G., A4-52 College St. W., Belleville — High School Teacher — 1968 Graduate.

Smith, Miss Valerie, 1003-360 Torrance, Burlington — Teacher — 1968 Graduate.

Sydorchuk, Miss Marlene, 266 N. Christina St., Sarnia — Home Service Representative, Union Gas Co. of Canada — 1968 Graduate.

Walker, Mrs. Elaine, R.R. 3, Coldwater — Homemaker, Teacher — 1968 Graduate.

Quebec

Jackson, Mrs. Muriel E., Hudson High School, Hudson Heights — Teacher — 1968 Graduate.

Lee, Miss Judith A., 3666 Lorne Cres., Montreal 2 — Dietetic Interne — 1968 Graduate.

Maki, Miss Wilma, 3-810 Fort St. Louis, Boucherville — Teacher — 1968 Graduate.

Nova Scotia

Conrad, Sister Greta, Mount Saint Vincent University, Halifax — Assistant Professor Home Economics.

Prince Edward Island

Smith, Miss Rosemary, 73 Watthen Dr., Charlottetown — Home Economist, Newstart, Inc. — 1968 Graduate.

Outside Canada

Silver, Mrs. Connie, 4½ Castle Dr., Potsdam, N.Y. 13676, U.S.A. — Substitute Teacher — 1968 Graduate.

NEWS ABOUT FOOD & EQUIPMENT

Continued from page 19

of 128 ozs., are being used for new "Domestic" cooking oil marketed by Canada Packers Ltd. New "Domestic Oil" is produced from sunflower seed oil and is distributed by the company as a natural product which naturally seals in the flavour of any food being fried. The "Domestic Oil" coming from sunflower seed oil is high in polyunsaturated fats showing on the label 55% polyunsaturated fatty acids and 10% saturated fatty acids. "Domestic Oil" now has full distribution across Canada in major supermarkets and independent grocery outlets. Suggested prices range from 57¢ for the 16-oz. bottle to \$3.49 for the 128-oz. bottle.

York Orange Twist

Not a new dance but an exciting new product developed by the Davies Division of Canada Packers Ltd. The product is a combination of York Peanut Butter and a distinctly new orange jelly—the two products being appealingly swirled together in the jar. Attractively marketed in a brown, orange and white label, "Orange Twist" is sold in a 16-oz. size jar and costs only a few cents more than regular York Peanut Butter. "Orange Twist" is the second product of its kind to be introduced by the company. Earlier this year "Apple Jelly Twist" was introduced and consumer response to it has been very favourable.

It is not cowardly to feel anxiety, but it is silly not to do something about it.

BOOK REVIEW

Food For Modern Living (Canadian edition), Irene E. McDermott, Mable B. Trilling, Florence Williams Nicholas, Phyllis J. Meiklejohn (Editorial Consultant) 1968—McClelland and Stewart Ltd., Toronto/Montreal and J. B. Lippincott Co., Philadelphia, New York—\$8.15.

With Mrs. Meiklejohn as editorial consultant, *Food for Modern Living*, just published in 1967, is available now in a Canadian edition. No longer is it necessary for us to translate the Basic Seven into Canada's Food Guide or the American grades into Canadian equivalents.

In certain respects, this book is similar to *Food for Better Living* by the same three authors, McDermott, Trilling and Nicholas. It contains many photographs, some in colour, interspersed throughout the text. Probably there will be those who would prefer fewer illustrations and possibly larger ones. Doubtless though, the illustrations will increase the attractiveness of the book for a high school girl. She will find it easy to read, clear and concise.

The increased emphasis on consumer education to-day, is reflected in the details included for the production, processing, distribution, marketing and purchasing of the various foods. Preparation, including recipes are included. Unfortunately they use the confusing abbreviations for teaspoon and tablespoon—t. and T.

In addition, the importance of management is stressed. The unit on the kitchen and the one on Management in Food Preparation should be invaluable for training our future homemakers. The inclusion of a table such as the one on calculating the cost of owning and operating a freezer illustrates one effort made to teach evaluation.

Since appreciation of current practices is recognized in the unit on the Dining Centre, Table Setting, Service and Manners, the information has more immediate interest.

Nutrition is stressed throughout. The inclusion of Canada's Food Guide in the front of the book and the tables of nutritive values of the Edible Part of Foods in the back of the book are important additions.

The index sections seem complete. There are three—one general index, one recipe index and an index for tables, diagrams and pictured instructions.

At the end of the chapters there are a series of questions, suggested exercises and book lists. The titles of these are:

- (1) To understand (word lists are included).
- (2) To apply what you have learned.
- (3) To read further.
- (4) Additional reading for advanced students.

Thus the pupil can check her own comprehension of the chapter as well as find suggestions for application and further study of the topic.

As a further aid to the teacher, a separate Teacher's Guide (Canada), is available. In addition to a general preamble, there is a list of suggested films and suggested classroom activities for each chapter. This could be useful for any teacher, novice or experienced. The guide would be well worth the \$1.25 additional cost.

The book would seem to be suited to Grades IX and X, particularly, although it would provide information and exercises for Grades XI and XII also.

It is quite comprehensive and should be a valuable addition to any Home Economics Library. *Dorothy Willmot, Danforth Technical School, Toronto.*

Clothing — A Comprehensive Study. Hazel T. Craig. (J. P. Lippincott). McClelland & Stewart, 1968.

This book is a welcome addition to a teacher's library as a means of bringing her up to date in the changes taking place in the world of clothing and fashion. It deals with the evolution of costume and fashion in a very easily read manner.

For students it gives them an insight into fashion from the ancient to modern day, including the social and psychological aspects of clothing and written in a manner that they would find easy to read.

The lists of suggested projects and books for references would also be very useful to persons wishing to pursue any of the topics further, or to conduct discussions with their groups.—*Jean Bell, Agincourt Collegiate Institute, Agincourt.*

Cooking with Charm—George J. McLeod Limited, 73 Bathurst St., Toronto 2-B, Ontario, 1968. \$8.50.

For many of those who knew Mary Millichamp's as one of Toronto's most famous and best-loved dining spots, "Cooking with Charm" will be a welcome addition to a cookbook collection. In memory of Mary Millichamp, some of her most elegant and easy recipes have been gathered together and published in aid of the Multiple Sclerosis Society of Canada.

A wide variety of recipes are included: appetizers, luncheon and supper ideas, meat, poultry and desserts to name but a few. There is also an interesting chapter on beverages covering kinds of wine and what type of wine to serve with what food.

Added interest is created through the use of anecdotes and scraps of memorabilia from some of those who knew Mary Millichamp well. These, along with the author's own comments for specific recipes make for most enjoyable reading. Small line drawings interspersed throughout the book also add a certain charm.

It should be kept in mind that because the recipes are reprinted from her own personal recordings, detail is lacking in some cases. There is inconsistency of recipe format with the occasional method being omitted.

The one major complaint, however, is the absence of an index. Although there is a table of contents, it would be difficult to relocate a specific recipe.

"Cooking with Charm" could be recommended for anyone who enjoys the art of cooking, whether it be basic or gourmet.—*Jean Patterson, Canada Packers Limited, Toronto.*

The Complete Book of Pasta—Jack Denton Scott—George J. McLeod Limited, 73 Bathurst Street, Toronto 2B, Ontario, 1968. \$17.00.

A book for collectors, pasta lovers and gourmet cooks. An astonishingly wide variety of pastas and pasta dishes are delightfully described in this comprehensive book. The enthusiasm and dedication of the author is quite contagious as one thumbs the introductory pages and examines the beautiful black and white photographs of Italy featured throughout.

A big plus for the uninitiated in pasta cookery is the glossary of terminology—over 100 pasta terms are elucidated and forty life size drawings quickly identify different shapes and sizes. Although all may not be readily available in Canada, as the author points out, others may be substituted in particular recipes.

Introductory pages include a brief history of pasta and a charming description of many Italian dishes as the traveller to Italy finds them in their natural locales—a radical change from the meatballs and heavy tomato sauces generally attributed to Italian pasta cookery in this country.

The techniques for making your own pasta are laid out step by step and instructions for cooking both homemade and commercial pastas described in detail.

The recipes are well written and easily followed by all. The dishes—over 500 in all—include soups, seafoods, meats, poultry, game and vegetables, and range from simple sauces to such specialty items as green noodles with venison, fettuccine with hare and roast stuffed suckling pig. A great many will involve shopping in specialty stores for hard-to-find items.—*Barbara A. Hill, The Canadian Dairy Food Service Bureau, Toronto.*

Directory of Community Services in Ontario—Nutrition Committee, Ontario Dietetic Association, Toronto, 1968. \$.50, 40 pages.

Professional persons, especially those in the fields of health service and education, look to the nutritionist and dietitian for information and advice about foods and nutrition. Sometimes knowledge regarding the availability of this pertinent information with a particular community can be lacking.

The Directory of Community Nutrition Services in Ontario has therefore been compiled by the Nutrition Committee of the Ontario Dietetic Association as a reference for use at the community level. It is anticipated that it will have wide distribution among those who from time to time require up-to-date facts about available facilities.

Questions can arise among dietitians themselves regarding the scope of information and services offered by a particular

Continued on page 29

Abstracts of Current Literature

Submitted by the staff members of HOME ECONOMICS DEPARTMENT, MOUNT ALLISON
UNIVERSITY, SACKVILLE, N.B.

Infant feeding practices—a predisposing factor in hypertension?

H. A. GUTHRIE

1968

The American Journal of Clinical Nutrition 21:863-867.

During the present century there has been an early introduction of solid foods in infant feeding. Today many infants are fed solid foods in addition to milk as early as two weeks and many have a mixed diet before three months of age. Some questions are being raised about the possibility of later undesirable effects from the early introduction of solid foods in infant diets. There is recent evidence that the practice may be a contributory factor to hypertension.

To investigate the role which the age of introduction of solid foods had on the sodium content of the diets of infants, eighty-nine infants were studied at 3, 5, 7, 9, 11 and 13 weeks of age. It was found that by 13 weeks the infants who had been on a mixed diet from 3 weeks of age were consuming twice as much sodium from solid foods alone as those who started from 5 to 7 weeks and three times as much as those who started at 9 weeks. The infants who received solid foods from 3 weeks were receiving approximately 230 mgs sodium per day from solid food, 300-350 mgs of sodium from milk and in some areas possibly an additional 1000 mgs from the water in the formula. With such a high sodium intake the hazards for a hypertension-prone infant should be considered especially since a high sodium diet has been shown to induce hypertension that becomes self-sustaining in animals. While there is no experimental evidence to date in human infancy regarding a relationship between dietary sodium levels and hypertension the necessity for studies with infants is indicated.

Multi-color yarns on the move

INTERNATIONAL TEXTILES INTERIOR

1968 No. 1, pg. 117

This brief article deals with new techniques in achieving color patterns with yarn. A resume of older methods classifies all multicolor dyeing of yarn as "space dyeing."

One recent technique, Astro dyeing, is covered in detail. Under an American patent, this method is unique in achieving complete control of color pattern inside the bobbin. Started on natural fibers, it is now possible to use it on synthetics.

A purely yarn-dyeing idea in the beginning, it has become a challenge to textile designers to use the yarn in creating many new types of design.

Some of the advantages given are color in different varieties; use in warp and weft yarn, either pure or in combination with plain yarns; a careful calculation of the length of colored areas made possible; any color combinations from bold to soft, tone-on-tone and ombre; no undesired patterns in weaving and a "planned coincidence" of color patterns by the use of a special color computer.

Color illustrations accompanying the article show drapery, Swedish woven, in leno weave, with slub yarn and with iridescent yarn in Jacquard weave.

Management Through Motivation

G. R. ALBERT

Volume 1, April-May 1968

1968 Commercial Feeding Executive 1:9

The complexities of our modern society make it imperative that the manager learn not only "personality construction of learning" theories, but also the equally important techniques of alteration of human behaviour and the development of human potential. Changing the personality from the outside is difficult, but if you can get the individual to want to change from the inside your chance of success increases

sharply. So in order to change behaviour we must develop inner motivation—a self-development attitude. Personality is behaviour. Behaviour is learned. You can change the personality by learning new behaviour.

Motivation is not the manipulation of people to your will. It is the arousing of the voluntary moving force from the individual's free will to create the inner desire to do what you want done.

Motives-Drives-Incentives

Drives are determined by physical needs. They are built into the human organism. Motives are emotional; they are learned needs. An incentive is anything which an individual feels will satisfy a drive or motive. We cannot supply drives or motives to an individual. We can only supply incentives to help him satisfy his needs or motives. Motives and drives are the same for everyone but incentives vary with the individual. They are the intermediate achievement, the reinforcement which impels a person along the road towards the goal selected.

Conditioned Reflex

A conditioned reflex can be defined as a reflex which is activated by a new signal, as a result of new connections being formed within the brain. It is produced in man by repetition. It will deteriorate if not reinforced. If an instructor says "good" at the instant the learner completes a movement, reinforcement is immediate, and thus more effective. He should not wait for perfection before saying "good". This is the best way of shaping behaviour.

The one-day house

J. H. INGERSOLL

1968

House Beautiful vol. 110, No. 10 pg. 132

This article attempts to bring us up to date on the prefabricated house, showing its earliest forms, the latest development and hopes for the future.

Diagrams show some recent use of panelization, and timed photographs show a church built in one winter's day.

The author feels that with our early beginnings—precut stones in ancient Egypt, panelized wood houses in America in 1624 and in the 1860s—the surprising thing is

that by now more houses are not built in one day. The answer, he feels, and the real problem, is that the distance from factory to home site is often so great that it is usually less expensive to build conventionally.

However, a certain amount of prefabrication is being used. Complete wall panels, complete bath, one piece bath-kitchen core inspired by Habitat, apartment units ready for stacking into apartment houses.

At least one American architect believes that the mobile home people have a start in this field. He is quoted as saying they could become the leaders in meeting the world-wide need for "handsome, well engineered, low-cost dwelling units."

The stigma of "jerry-built", low income, "cracker box" of past projects is examined. An undeserved stigma as prefabricated houses today cost as high as \$100,000 and the war-time relatives that inspired the derogatory terms were only intended to be temporary.

The author examines the advantages and disadvantages that go with these today, and finds transportation cost from factory to site still the main drawback.

The article ends with predictions that by the year 2000 nearly everyone will be living in a prefabricated house. Or in ten years, 40% of the homes will be of this type.

Bread from Non-wheat flours

J. C. KIM AND D. DE RUITER

1968

Food Technology, 22:867

Many of the developing countries are turning toward the use of bread in their diets. The climate and/or soil of these overpopulated countries often restrict the production of wheat which is a normal constituent of bread. Starchy tubers and cereals are grown, however, and flours can be produced from cassava, sweet potato, yam, corn, and sorghum.

These flours are high in starch and low in protein, which restricts their use as the sole flour in bread-making. If supplemented with a protein substance, which would contribute to the structure of the loaf, tuber-flours could be used.

Such a protein can be obtained from a "seed cake," which remains after oil has

been pressed or extracted out of oil-seeds (e.g.: peanut, cottonseed, soybean). The remaining oilseed "cake" has a high protein content.

This paper presents an account of methods of preparing a quality bread from composite flours containing tuber flours and protein concentrates. Flours made from cassava, yam, and sago, were combined with peanut flour or with soya flour to create the composite flour. Ultimately a satisfactory loaf was obtained when made with flour based on cassava flour and starch, mixed either with peanut flour, or with soybean flour.

The importance of binding the starch granules was fundamental to the achievement of acceptable volume and texture in the loaf. Four substances were tested, of which glyceryl monostearate was found to be the most effective agent in binding starch.

Variations in sugar content, fermentation procedures, and mixing techniques were all tested.

The nutritional values of the cassava/peanut bread, and of the cassava/soya bread were compared with that of regular wheat bread. Albino rats were used as the experimental animals. The test loaves were found to be higher in protein than the conventional wheat loaf.

Further work is needed to determine taste preferences on the loaves, and also public acceptability in those countries where the bread would be produced and marketed.

The report is well documented, and includes excellent photographs of the various products, as well as data tables.

Widowhood status in the United States: perspective on a neglected aspect of the family life-cycle.

FELIX M. BERARDO
1968

The Family Coordinator 17:3, 191-208

This scientific paper states that widowhood is rapidly becoming a major phenomenon of American society, but it is a neglected aspect of the family life cycle.

In the United States there are currently well over eight and three quarter million widows, and this number will expand. In spite of this expansion very little research has been carried out in the special problems of this group.

Any study of widowhood status presents a dismal picture. The majority of women survivors generally have to face a multiplicity of personal and familial adjustment problems while at the same time attempting to establish a satisfactory adaptation to a new and relatively undefined social role. Many of them must seek employment because of economic pressures. If children are involved this means extra care while the mother works.

The widowed die sooner, are more prone to suicide, they exhibit undue anxiety and emotional tensions, and are generally unhappy and insecure.

Any change in marital status causes change in activities, responsibilities and living habits, and widowhood is no exception. A knowledge of the variations in successful adaptation to this status would prepare individuals and families for dealing with this common experience with better understanding and insight. "The pain of grief cannot be avoided; but proper preparation will help in facing the work of grief, will lessen the disruption of family life, and will prevent the making of unfortunate decisions during this period of strain."

PERCEPTION & COMMUNICATION

Continued from page 5

The first is that subject matter content is of primary importance. This is because motivation to gather information comes from subject matter problems. Subject matter is so important that, given an extremely high interest in the topic, a reader will plow through some tough handicaps in writing style and presentation.

Attitudes are a part of the perceptual configuration. They can intervene and inhibit communication. Even attitudes toward the source can do this. The corrective response to this should not be preoccupied with whether or not they like us, but rather does the program we offer provide the solution for which they are looking.

The final assessment of our success is measured in perception, but more important in generated action. Thus, the action steps we take in communication can and should be keyed to the action we want on programs.

Trends in Home Economics in the Schools of Manitoba

HELEN JANZEN — B.A., B.Sc. (H. Ec.) B. Ed.,
Supervisor of Home Economics Manitoba Dept. of Education

Basic to the philosophy of home economics education in public and high school has always been the strong belief in the family as a basic unit to develop meaningful relationships, to form human personality, to transmit values and to lend stability to the social structure.

Every man, woman and child has a home base which affects the quality of life. Ben Bloom of Taxonomy of Educational Objectives now claims that even intellectual development can be stimulated or dulled irreparably during the first two years of a child's life. The goal of family living and all family management is surely to create an atmosphere in which all members can develop to their fullest physical, social, intellectual and emotional potential.

When Urie Bronfenbrenner of Cornell University came last year to Manitoba School of Home Economics to conduct an institute on Child Development, he showed slides of children in nursery school, taken in the Soviet Union, small groups, each of them with an "upbringer", a motherly looking woman in a white uniform. He noted further that everywhere in society and public media the values inculcated in childhood were being reinforced. As a father and a Sunday School teacher, he rather sadly noted the fact that in our society we do so little in our mass media to reinforce the values we try to inculcate in the home and the school.

What are trends now—What of the future? Our rapid technological progress has changed our mode of living, the nature of our employment, our buying practices and has resulted in migration of peoples, loss of community feeling, increasing affluence-poverty gaps, the diabolical nature of modern warfare and the loosening of family ties and social structures. It is difficult to predict a static future.

Except this: And this is of crucial im-

portance: Home Economics has always adapted itself to serve the personal needs of human beings and been there to help strengthen family life, and can do so better perhaps than any other discipline.

The Canadian Department of Labour states that many young women will work for twenty-five years of their married lives. Half of the number of working women are married now. The American Vocational Act of 1963 stipulates that wage earning goals must be present in high school home economics courses. This is part of an anti-poverty measure.

Yet, according to Lorna Davis, the former Director of the Manitoba School of Home Economics, "Women have perhaps a greater need for good general education than men, since women largely pass on our culture and our value system to the next generation. *Women's educational needs are therefore much more complicated than a man's.* A Society can only go so far in weakening its home and family system before disintegration sets in. The society which deliberately ignores this need for education for responsibilities of home and family living is asking for trouble. There now may be too many anti-family influences and the hole in the dyke may be bigger than the finger we have to stick in it, but it is of the utmost importance that we give our best to the teaching of the rock bottom essentials of our work in the little time available to us."

I resent two concepts:

1. That general homemaking in Junior High is so good that girls get enough skills in this field and don't need to study home economics in high school. It is true that junior high students love the kind of self-realization that comes from creative activity and we should encourage this, but the homemaker's task today is more than "doing" a few things such as cooking or sewing, in the same way the surgeon's task is more than cutting and stitching.

Presented Canadian Home Economics Biennial Convention—Regina, July 1968.

A Junior High child has not the maturity to develop insight into the complicated human interaction and personal relationships of family living, the social and psychological aspects related to housing, world nutrition, clothing and child development. The maturity for this comes largely in Grade XI and XII.

2. Secondly, I resent the implication that high school home economics is not an integral part of general education for all girls and that it is chiefly for wage oriented students who cannot do abstract thinking.

What are trends in Manitoba?

I would like to mention three developments:

1. There is a great increase in demand for home economics. We have discussed plans for 21 new rooms this winter; some will open this December, others the following September and a few may have to be postponed. How much we continue to expand will depend on the money situation in Canada of course. Each Division has to justify demands by enrolment before the Building Projects Committee grants approval. Then architects are asked to come to see us and then there is joint planning of space and facilities.

In 1959 we had 71 home economics teachers in the province, but in September 1969 there will be approximately 175. Five years ago the University of Manitoba had 180 undergraduates and 4 graduate students. This year they had 429 undergraduate and 15 graduate students. About 47 home economics graduates took teacher training this past year. Nearly all of our teachers are home economics graduates with teacher training, and they nearly all teach a full-time home economics program.

2. Program: Curriculum Development in Manitoba.

We have three new programs: a junior high, an occupational aspect and a home economics option course for grades 10, 11 and 12. The latter is being studied now by the University Admissions Committee for consideration as an open elective for all admissions.

Generally speaking we constantly observe that junior high students love creative activity. We believe that we should not hold them back, but use this as a motivating

factor. We have also included in the junior program, a unit on Personal Development, on Money Management, and increased emphasis on Child Development, with an authorized text "Understanding Young Children" at grade IX level. As a matter of fact we teach some Child Development in Grade VII, more in Grade IX and give a concentrated course in Grade X. Why? It used to be said that the hand that rocks the cradle rules the world. Now we have to say: "The hand that rocks the cradle is often that of a lonely teenager, as baby sitter or young mother, often as sole supporter of the child, and many times in a strange city, away from relatives and friends who could give counsel and guidance."

In Grade XI we have a broad reading reference list for the Child Development program and students visit nursery schools.

Our Occupational Aspects Junior High program is designed to give basic skills, desirable attitudes and habits useful both for homemaking and job retention. It is pre-vocational in aims, objectives and scope. The program contains a one-term exchange of boys and girls at the Grade IX level. The boys take a "Home Chef's" course and the girls a "Home Mechanics" course, on an optional interchange basis.

We really put our big effort into our new High School Options program, geared to University Entrance, General and Commercial course girls.

This program has two basic general education aims.

(a) Development of critical thinking, and of desirable values, standards and skills for personal family and community living.

(b) Development of a broad base of knowledge as a useful background for further education in institutions of higher learning such as universities, schools of nursing, pre-school or teacher education, technological institutes and for other avenues leading to public service.

We felt we had to pay more attention to clarification of values, management to reach goals, decision making, child development, family living, consumer education, contemporary housing, social and psychological aspects of all human endeavour. We have also introduced inquiry, discovery, research, independent project studies particularly for brighter students.

We developed the fields of study in four areas:

Housing, Family Living, Foods and Nutrition, Clothing and Textiles.

In Grade XII, we study Contemporary Housing and Community Planning, World Nutrition, the Role of the Family, Clothing and Textiles and sociological, psychological aspects of all areas of study.

3. A third development is continuing education for home economics teachers. Our Home Economics Teachers' Association working with the Department of Education, Teachers' Society and the University plan their own workshops in order to prepare to teach new courses. I note the vigour with which this is done across Canada. I also note the courtesy invitations extended to other provinces.

Our teachers had a workshop on Management last August and this August there will be an exciting workshop on Contemporary Housing, to which we also invite representation from other provinces. Our own University School of Home Economics has for the past number of years given two-day institutes. This year they offer a two-day textile workshop just prior to our Housing Workshop.

As to the future of home economics in schools? As we urbanize and become more crowded in our cities, and I fear, perhaps more impersonal in our relationships to others, the need for good home economics education will grow greater, not less.

There will also be a growth of regional vocational schools, where the emphasis will be both on general and occupational training of various kinds. Many boys as well as girls will train for jobs in the food service in teaching cafeterias and these need not always be taught by women. There is scope for a great deal of cooperative education here.

There will be frequent curriculum revision with more opportunities for students to exercise choice in electives, including the University Entrance programs.

How much or how rapidly we will expand will depend on public recognition and demand, and our ability to communicate to pupils and their parents, the tax payers, the vital need for home economics education for all girls and our ability to keep the program relevant to the needs of all girls.

BOOK REVIEWS

Continued from page 23

organization. This has been detailed in the publication.

The agencies included have been grouped into a logical sequence. It will be seen that Government Departments at each level of administration offer consultative services, educational material, and may in fact act as co-ordinators of the nutrition activities in a community. The Public Service and the Health and Social Agencies have programmes that are often directed towards a particular specialty in the field of nutrition education to the public. In some communities the dietitian in the local hospital acts as the nutrition consultant. University Departments offer a comprehensive source of information, not only in foods and nutrition but in each of its subjects covered by their curricula. Professional Associations connected with the various branches of dietetics are another source of authentic information. The Home Service Departments of commercial companies are specialists in regard to the products of their firms. Many provide a valuable source of information about food preparation.

The purpose of this guide then is to categorize and outline the sources of nutrition information that are available in Ontario. It is anticipated that these will be used to their fullest potential for the betterment of a community and its citizens.—(Mrs.) Ann Bodley, Department of Nutrition, School of Hygiene, University of Toronto; and the Milk Foundation of Ontario.

WHO'S WHO

Continued from page 14

must be placed on budgeting food expenses, and that C.H.E.A. can play an important role in promoting the consumer acceptance of less well known and less expensive, but nutritious foods."

Our treasurer is an active member of the Ottawa Home Economics Association, enjoys travel and the preparation of gourmet food for her friends when time permits.

Home Economics In The Service of International Co-operation*

by WANDA YOUNG, *Past President, C.H.E.A.*

The British Home Economists had a rugged time at the Bristol Congress this summer. Once again, the pound had been devalued. The floods in West Country receded a bare week before the congress started. There were last minute cancellations, which meant the quota of delegates was not met. All this spelled financial trouble. One of the memories of those attending will be that of the ushers (Home Economists from West Country Gas Councils) collecting a pound or some shillings from delegates leaving Colston Hall meetings—to help with expenses. Things we missed due to these financial problems were the preliminary reports and the proceedings. Those of us who worked on the rather lengthy questionnaire that was compiled into the preliminary report were rather disappointed by the single sheet that was given us to represent the work involved. It may yet be possible to purchase proceedings.

Finances were a problem discussed at the International Permanent Council. Many of the services provided by the general secretary, Miss de Luget, many of the expenses of the international office are provided free of charge by the French government. Many of the Home Economists from Paris assist with the routine work of mailings, on a volunteer basis. These contributions help keep expenses down. However, the Federation would like to offer more services to its collective and individual members. It would like to provide a clearing house for information about nutrition, consumer problems, human development, status of women, food production, urban and rural living, communications—changes that are occurring around the world in these and other areas related to home economics research and provide an exchange of results. It would like to enlarge the Bulletin and develop other appropriate publications. None of these activities can be carried out on the present income.

Suggestions made as to methods to follow in increasing the income of the Federation included an increase in fees. This was not a popular suggestion because we are striving to include more members from developing countries. It was felt that any increase might create difficulty.

The number of memberships both collective and individual should be increased. Canadians could come to the rescue in this manner. We have only eight collective memberships. Each affiliated group might consider membership. This would more than double the number of collective memberships. Before the Bristol Congress, Canada had about twelve individual memberships. The cost is about four dollars. This is not a great sum to expend in assisting Home Economics at the international level. You do receive your own subscription to the Bulletin.

Another suggestion was that the International Federation establish a fund of sizeable proportions. The interest would be used to increase the services. Could you as an individual contribute to such a fund? Could you as an individual persuade your Home Economics Association to make a contribution? Any suggestions, enquiries or contributions should be sent to the International office.

International Permanent Council

The six official delegates to the International Permanent Council meetings—the business arm of the Federation—were Ruby MacNeill, Lillianne Labelle, Dr. Margaret McCready, Dr. Janet Wardlaw, Dr. Elizabeth Feniak and Wanda Young. From the moment that we stepped off the London underground at White Hart Station we were in a captive group at the College of All Saints. It was a pleasant captivity in this residential girl's college. Jenny and her three fellow students assisted us to our well equipped single rooms in Lambeth Hall. The students solved the intricacies of British currency and provided a shopping service for forgotten items and

*A report on the Eleventh Congress of the International Federation of Home Economists, held July 17 to 27, 1968, Bristol, England.

necessities. The dining room provided hearty breakfasts, substantial luncheons featuring British specialties, suppers, morning coffees and afternoon teas. Every six rooms had a kitchen with provisions for making our own hot beverages—and a special drying room—all most appreciated in a damp climate such as England. The auditorium made an excellent meeting place with the interpreters' boxes on the stage, the executive seated at a table across the front and delegates arranged alphabetically by countries at right angles to them. Canada should remember that although we are allowed only six voting delegates, each collective member may have an observer present at these meetings.

The business of I.P.C. was threefold—to ratify the budget, to discuss the proposed constitution and to discuss long term plans. We were divided into language groups to discuss the framework for the latter, which had been prepared by Dr. Lela O'Toole (later elected as Vice-President). Most groups felt that we must settle the constitution and increase the income before the suggestions for improvement and new projects could be put into practice. An impasse came about in the process of adopting the new constitution. Should we carry on as the International Federation of Home Economics (I.F.H.E.) or should we become the International Federation of Home Economics Education (I.F.H.E.E.)? French speaking countries feel the word education must be included. English speaking countries feel that the inclusion of the word education is too limiting. The Constitution Committee has been asked to reconsider their proposals, to present them again at the next I.P.C. meeting to be held in two years' time in Germany.

The two social highlights of the I.P.C. meetings included a gala reception at Arlington House, the historic headquarters of the Flour Advisory Board. It seemed appropriate that the city of Regina "wheat pin" should make a trip up the great staircase, reflect the sparkle of the tremendous Bristol chandeliers and peep down at the lovely back garden, a quiet refuge from the central London traffic.

A damp but delightful half day was spent in Cambridge following the meetings. We explored eight-year-old Winston Churchill College and Queen's College. The rain

blotted out Kings and Trinity but the hot tea, fancy sweets and savouries prepared for us at Perse Girls' School restored our spirits.

Canadians at the Congress

Marjorie Kennish is a management expert. She coralled the I.P.C. luggage, the porters, and British coinage to ease the travel for over one hundred delegates. Marjorie Kennish is a diplomat. She pointed out to questioning Canadians the language problems of the executive council. We were pleased to hear her graciously thank the Mayor of Cardiff and the Lord Mayor of Bristol for the two receptions that their cities gave to the Congress. The second plenary session, during which M. Jean Keilling of France spoke on the scientific and economic aspects of international co-operation was chaired by the Vice-President from Canada. Finally, we were grateful to the President, Fraulein Leny Voellmy (who is continuing for a second term) for her gracious thanks to our Miss Kennish on the conclusion of her term office with the Federation.

Balloting occurred at the final I.P.C. meeting, held during the Congress in Bristol. The Canadian nominee, Dr. Margaret McCready, gained support from many countries and was elected to one of the three openings on the executive council, on the first ballot. Dr. McCready is now our link with the executive of I.F.H.E. Let us support her by increasing memberships and contributing to the fund.

Congresses are planned with sub-plenary sessions for special interest groups. Section One, consisting of persons interested in dietetics, catering and institutional management heard, in their first session, Dr. Helen Abell from the University of Waterloo. In her topic "The Social Advantages of Institutional Life and Group Feeding for Mixed Ethnic Groups", Dr. Abell stressed the need for teamwork in social groups. She pointed out that communications are two way, with listening an important part of the process. To be successful you must consider the needs of the group and members of the institution with whom you are working.

Discussion groups have given participants an excellent opportunity to meet those from other countries on a more structured basis

than at social events. Lila Engberg and Dorothy Pearson (both on service outside Canada), Sister Jeannine Cornellier and Wanda Young were group leaders. Ruby MacNeill, Dr. Betty Feniak, Dr. Elizabeth Down and Lucille Paulson were invited to be secretaries of their discussion groups. Professor Carmelle Therien translated in a mixed group. We were pleased that Sister Jeannine was invited to bring one of the reports back to the Congress as a whole.

Four resolutions came to the final assembly from the discussion groups. In summary they were concerned with;

(1) Establishing an International Institute of Home Economics to act as a clearing-house for research and exchange.

(2) Developing a code of practise for exchange visits.

(3) Developing a unique philosophy of Home Economics education for each culture rather than imposing that of highly developed countries.

(4) Establishing international standards for nutrient content and hygiene of foods and safety of industrial products.

All told seventy-eight Canadian Home Economists attended the eleventh international congress in Bristol. These persons will be making plans to attend the twelfth congress in Finland. Won't you join us?

Congress Organization

How is a congress planned? A theme is chosen. The theme of the eleventh was that used for the title of this report. Speakers are obtained for plenary sessions, which this year, dealt with sociological implications, scientific and economic aspects and the application to education.

Participants indicate their subject matter interest in Home Economics and on this basis sub-plenary speakers are obtained and discussion groups are formed. This year, the divisions were Section One—Catering, Dietetics and Institutional Management; Section Two—Professional Training of Home Economists; Section Three—Education Up to Statutory School Leaving Age; Section Four—Informal Education (Industry, Public Relations, Journalism, Social Service, Community Development and Service of Youth).

Free time is provided for making professional contacts, exploring the congress city or for rest. An innovation at this

eleventh congress were the exhibits in the Victoria Rooms. Booths were arranged much as at the Canadian conventions. These gave one a glimpse into the way in which British industry assists Home Economists. Co-operating professional organizations such as the Council of Scientific Management in the Home took booths. I personally was grateful to receive the Little Lion books—but disturbed to note that since the British homemaker does not accept him, the British Egg Information service has decided that he will not be used to identify inspected eggs.

Fun time was well planned by the British Home Economists. From the moment the congress opened with the traditional British pomp and ceremony—a procession of four mayors escorted by colorfully clad retinues to the final burst of fireworks over the marquee raised to accommodate the eleven hundred delegates at the West Country Supper Party we were most impressed by British hospitality. The Bournemouth Symphony gave us a concert. The Bristol Youth Orchestra accompanied the final supper. The cities of Bath, Cardiff and Gloucester rolled out the red carpet with tours of their training colleges, receptions and entertainment. I have never quite enjoyed "pop" so much as sung by Yr Eirllipiau (a sweet voiced Welsh group—the Snowdrops). The usual visit to homes was arranged. Some of us missed this because we were guests at the Council House (city hall) for the reception given by Lord Mayor Mrs. Mercia Castle. This was one of the occasions when it was possible, again, to see participants in their national costume. Air transportation and new easy-care fabrics have reduced the number of national costumes brought to such meetings. "Interest" associations gave receptions. My formal dinner at the Grand Hotel was by the Association of Teachers of Domestic Science. The Master of Ceremonies conducted us through the sipping of Bristol Cream, ordered the chairman to carve the Baron of Beef and finally sent us home with great respect for British traditions.

Before and after a Congress various study courses and tours of nearby countries are arranged. I have spoken to many Canadians who report stimulating lectures and interesting discussions and sight seeing on these trips, that I was unable to share this year.

Summing Up

The summing up at the Bristol Congress was given by Dr. Lela O'Toole. She pointed out that we must develop a systematic program as to our philosophy and beliefs about Home Economics—not only at the international level but also in each member country.

The British Home Economists gave to Miss F. Laidler the last word. In saying farewell to this congress, she challenged us to meet the compromises of our civilization—the compromise between the increasing number of older people and the young, who want to be listened to; the compromise between the modern and the traditional, from which we must preserve some of the standards of integrity honesty and solidarity of relationships; the compromise between the affluent societies and the developing countries. Home Economists must give time to thinking about their personal duty in meeting the challenge of these compromises. They must recharge themselves to know what they want to achieve and why they want to achieve it. Home Economists can do much to be of service in today's world where no man is an island.

Circle These Dates

Future Conventions

- 1970: King Edward Hotel, Toronto, July 6-10, Joint CDA-CHEA Convention.
1972: Hotel Nova Scotian, Halifax, July 3-7.
1974: Vancouver, B.C., July 7-12.

Miss Young reported that there is a possibility that the C.H.E.A. may be hosting the International Federation of Home Economics Congress in 1976. Alternatively the C.H.E.A. may hold a joint convention with the American Home Economics Association.

Circle these dates

Week of March 2, 1969 has been designated as Consumer Week in Canada. The theme of the week will be "Consumers Count".

Nova Scotia Home Economics Association—Annual Convention—tentative dates October 17, 1969 at Dartmouth.

JESSIE MARGARET LAMBDEN

(Mrs. Gerald B. Coles)

News has recently been received by the Journal Staff of the death of Jessie Lambden Coles in Welland, Ontario, in May 1967. Mrs. Coles was born in Tillsonburg, Ontario, and graduated in Household Economics from Victoria College, University of Toronto in 1933. She did her internship at St. Luke's Hospital in New York and in 1938 joined the Women's Institute Branch of the Ontario Department of Agriculture as a Home Economist. Early in the war, she became a member of the faculty at Macdonald Institute, Guelph. When "Mac" was taken over by the R.C.A.F. she was loaned to the airforce as instructor in the School of Cookery. At the completion of the war she returned to the faculty as head of the Department of Food and Nutrition. From 1948-49 she was on leave of absence to study at Cornell University where she obtained her masters' degree in Education.

In 1953 she married Gerald Coles and went to live in Welland where she played a very active part in the life of the community.

Jessie Lambden Coles was a warm, kind, friendly, sympathetic person, always ready and willing to help people. There are many in our profession, especially those who were students of Jessie Lambden Coles at Mac, who will remember her with a deep sense of gratitude.

In the realm of the physical, repeated insults to the human machine in earlier life, such as infections, injuries, strains, chronic malnutrition, alcoholism, drug addiction, obesity, shock, and emotional turbulence, cause changes in the body cells which are conducive to aging.

Happenings!...Happenings!...Happenings!

Miss Mildred C. Orr, B.A., B.S.(H.E.)

Miss Mildred C. Orr has retired from her position as Provincial Director of Home Economics in British Columbia, after serving in this capacity for nine years. Previous to this time, Miss Orr held the position of Inspector of Home Economics for 14 years.

Miss Orr was born in Portage la Prairie, Manitoba, received her primary education in that city, then attended schools in Vancouver and Victoria. She attended Victoria College for two years, then proceeded to the University of British Columbia, where she obtained her B.A. degree, with additional courses in psychology. Miss Orr received her B.A. (Major in Home Economics) degree at Oregon State College in 1941.

Miss Orr's professional experience is as follows—three years teaching languages and teaching home economics in junior-senior high schools in British Columbia. Since 1945, she has been on the staff of the Division of Home Economics, as Inspector then Director of Home Economics for the Province of British Columbia.

Miss Orr is a member of: C.H.E.A., A.H.E.A., C.A.C., A.V.A., C.V.A., Victoria Home Economics and Dietetic Association, and the University Women's Club of Victoria.

Miss Jean R. Irvine has been appointed Provincial Director of Home Economics to succeed Miss Orr.

University of Saskatchewan Home & Family Program with Indians

The Home and Family Program of the Extension Division, University of Saskatchewan, Saskatoon, with financial assistance from the Saskatchewan Association of Homemakers Clubs, collects and refurbishes used treadle sewing machines for women on Indian reserves. It's part of a program of providing homemaking courses for Indian women that started rather dramatically in 1965, when Mrs. Ann Colley, extension specialist in home management at the University of Saskatchewan, visited the James Smith Reserve near Kinistino.

Since then nearly 1,700 women on 44 reserves have enrolled in 166 courses and 120 women have received sewing machines, which are presented on the completion of 60 hours of instruction. Treadle machines are given because most of the homes on the reserves are without electricity. Women who already have machines receive sewing kits.

For the first two years, Home and Family conducted the program on its own, but since last year the Indian Affairs Branch, Department of Indian Affairs and Northern Development, has provided financial backing.

Miss Margaret Pattillo, director of Home and Family, said that the program has been well received and the courses are growing in popularity. Essentially, she stated, it is a "trainer of trainers" program. Instructors are trained at the University in Saskatoon, who then go out and provide the courses on the reserves. Promising students among the Indian women taking the courses are encouraged to obtain further training and to become instructors themselves. All 20 of the local foods instructors and four of the 80 sewing instructors are Indians.

Long term objectives of the homemaking courses include learning to plan and organize work in the home, learning to choose wisely, and developing attitudes of co-operation, responsibility and helpfulness.

Miss Pattillo commented that the women are eager to learn and they develop skills quickly. She said that the program is well received and attributed this to its being a meeting of women with women, based on a concern by women for women.

University of Guelph Appoints Head New Food Science Department

Dr. J. M. deMan has been named Chairman of the newly established Department of Food Science, at the University of Guelph. Dr. deMan, who comes to Guelph from the University of Alberta, Edmonton, will assume responsibility for the University of Guelph's comprehensive new teaching and research program in Food Science.

A native of The Netherlands, Dr. deMan graduated with the degree of Chemical Engineer from the Netherlands Institute of Engineering Technology in 1951. He came to Canada in 1954, Obtaining a Ph.D. degree from the University of Alberta in 1959, he then joined the faculty and has helped supervise the evolution of the Food Science program at the University of Alberta.

Dr. deMan's appointment at the University of Guelph coincides with the establishment of a new Bachelor of Science study program in Food Science. The emphasis in the curriculum will be on preparing graduates to meet the growing need for highly trained food scientists in the food industry.

College Club News **La Femme Mystique**

La Femme Mystique—a unique showing of international fashions for men and women, was presented on November 27 by the Home Economics Students' Society of the Saskatoon campus of the University of Saskatchewan. Held in the newly opened Centennial Auditorium, the show was well received by the 2000 spectators present.

Flowing movement characterized the showing of international fashions. Trained university models created the moods of fashion centres of the world. Special designs featured were by Pierre Cardin, Torres, Elvia and Frederick, and Allison.

Furs and formal wear, the highlight of the second part of the showing, drew admiration from the audience. The free movement was carried through in the display of elegant furs and gowns. Special lighting effects caught the glitter and shimmer of brocades, and set the mood as garments of soft velvet and crepe, and luminous peau de sole were shown in designs created by Rudolphe, Elizabeth Aelen, Ruth Ducas, and Cezanne.

Comments heard after the presentation indicated the professional calibre of the show. The aim of the show was to bring together the general public and the university community and to promote a better understanding between them. At the same time, through this production, Home Economics students have shown clearly their creative potential.

Honorary Degree

Dr. Barbara A. McLaren

The University of Alberta in its diamond jubilee honoured some of its most distinguished Alumni. The School of Home Economics was also celebrating its fiftieth anniversary. Dr. Barbara A. McLaren was a popular choice for an Honorary Doctorate degree. She received this degree on June 5, 1968 at the same ceremony in which the graduates in Home Economics received their degrees.

Since 1953 Dr. McLaren has been dean of the Faculty of Food Sciences (formerly Household Science) of the University of Toronto.

Appointments

Dr. Kathleen Brown has been appointed to the faculty of the Department of Home Management at the University of Guelph.

She has had various teaching experience in Quebec, Ontario and England. Prior to leaving for graduate study at Cornell in 1964, Dr. Brown was on the faculty of Macdonald Institute.

Her area of specialization is Family Economics and she has been doing interdisciplinary research involving sociology and economics. Her more immediate area of study is the influence of social class position on family investment patterns.

The appointment of Miss Elizabeth (Betty) Fraser as Home Economist for Standard Brands Limited, Montreal, has been announced. Miss Fraser graduated from Saint Francis Xavier University in 1966 with a Bachelor of Science degree in Home Economics, and for the past two years has been teaching Home Economics at the High School level for the Calgary Separate School Board. During this time she acted as Research Representative for the Home Economics Specialist Council to the Alberta Home Economics Association.

Macdonald Institute Paper Wins First Prize at A.A.T.C.C. International Conference

For the first time a paper from outside the United States has won first prize from the American Association of Textile Chemists and Colorists, at their Annual Meeting in Montreal, October 16-18, 1968. This meeting was the first to be held outside

the United States by the A.A.T.C.C. in its 47-year history.

This year the Ontario section won the award with a paper whose authors are two Macdonald Institute scientists—Mr. A. B. Patel and Dr. H. R. Richards of the Department of Textiles, Clothing and Design. Dr. Richards is Department Chairman and Mr. Patel, who recently completed his M.Sc. in Textile Science, is continuing his research in the Department. Dr. Richards is a member of C.H.E.A.

The paper, titled "Some Aspects of Shrinkproofing and Inducing Stretch in Wool Fibers and Fabrics", was entered in the "Intersectional Technical Paper Competition" at the Association's recent meeting. In the competition, papers were presented by five U.S. sections and two Canadian sections—Quebec and Ontario. Along with the prize the Ontario section of the Association received \$300.

The paper described a new chemical method for shrinkproofing wool with negligible degradation of the fibers and a further chemical treatment developed to impart stretch characteristics to wool fibers or fabrics. In addition, a test method was outlined which was developed to measure the frictional properties of wool fibers, and an evaluation of treated fibers and fabrics was described. The paper will be published shortly.

MACDONALD INSTITUTE, 1903 . . .

Beginning in 1969 a new structure of programs in home economics will be built up at Macdonald Institute, under the title of Family and Consumer Studies. Within two departments, Family Studies and Consumer Studies, five Majors will be offered—

Family Studies

Applied Human Nutrition:

1. Administrative Dietetics
2. Therapeutic Nutrition
3. Community Nutrition

Early Childhood Education

Consumer Studies:

1. Consumer Economics
2. Foods
3. Housing
4. Textiles & Clothing { Socio-Economic or
Design Aspects.

Textiles.

The new program will be administered by the new Dean, Dr. Janet M. Wardlaw, previously Associate Dean and a professor in the Foods and Nutrition Department. Dr. Margaret McCready will begin a year's leave of absence on January 1st, 1969.

We cannot, by mere act of will, banish injurious tension, but we can get rid of it by constructive thought and action.

Workshop—University of Oklahoma

Home economists will convene with leaders in the field of rehabilitation to define their profession's role as a member of the multidisciplinary rehabilitation team at a national workshop at the University of Oklahoma, Norman, March 17-19, 1969.

Sponsored by the American Home Economics Association under a grant from the Rehabilitation Services Administration, the national interdisciplinary workshop will focus on "Future Directions for Home Economics in Rehabilitation."

Participants invited to attend workshop

sessions include school administrators, extension personnel, representatives of other disciplines in rehabilitation such as the psychiatrist, the director of rehabilitation center, the rehabilitation counselor, the director of a state rehabilitation division, therapists, the voluntary agency in rehabilitation and others.

The workshop was made possible through a supplemental grant of \$22,756 to AHEA from the Rehabilitation Services Administration of the U.S. Department of Health, Education, and Welfare.

XIth Congress, International Federation of Home Economics, Bristol, England, July 22-27, 1968

by MARGARET S. MCCREADY, *Dean, Macdonald Institute, University of Guelph*

Preceding the Congress, July 18, 19, 20, the International Permanent Council met in London, England, at the College of All Saints, one of over thirty such teacher training colleges affiliated with the University of London which grants the degrees. Home Economics students in training were a part of the large student body which had just dispersed for the session. The executive of I.F.H.E. welcomed us.

There were 103 members in attendance at the meetings, not all being voting members; some represented paid up collective memberships beyond the official number allocated to each of the 57 countries associated with the work of the I.F.H.E. (but 25 countries only were represented at these meetings).

Right at the outset discussion was keen regarding the promotion of a more modern Bulletin financed by increasing numbers of fees from individuals and collective member groups around the world. Also, the need was expressed for a Federation Fund to be built up to allow for the expansion of work and interest. The matter of an approach to funding agencies was proposed, as well as establishment of honorary members who might be asked for donations. A newsletter supplement to the Bulletin was mentioned as a cheaper method of keeping in touch with the many to be solicited for individual membership; also, the possibility of soliciting advertising in the Bulletin received attention.

Because of I.F.H.E. affiliation with F.A.O. (and UNESCO), the F.A.O. representative from Rome, Miss Jean Steckle, a Canadian, attended the I.P.C. meetings and outlined the new look, an interdisciplinary one, for action programs of the Home Economics Branch, Nutrition Division, F.A.O. Graduates in home economics are greatly needed to implement these programs. They may be employed as international volunteers, associated experts, or full-time home economist and nutrition specialists. Before the end of the Congress

the representative from U.N.E.S.C.O., Dr. Emmy Hookham, of Paris, outlined the developing need for Home Economics education in U.N.E.S.C.O. projects.

The members at the International Permanent Council were tendered a most delightful reception by the Board of the Flour Advisory Bureau in London at their 18th Century House in Arlington Street. Many members enjoyed a special bus trip to Cambridge and its ancient Colleges in their unique parkland settings.

Pre- and Post-Conference Tours and Study Courses

Many of the 1160 Conference delegates had enjoyed special study courses in English Home Economics Colleges or, had been involved in tours in Ireland, London, France, Switzerland, Norway and Denmark. Special friendships, scenic tours and unusual contacts were made in these smaller groupings. Then, for the Congress, five Halls of Residence of the University of Bristol accommodated the delegates in different parts of the city of Bristol on the Avon River. Again, friendships were made within the smaller residence groups.

The Congress

The large plenary sessions were held in the civic centre, Colston Hall, within walking distance of the University Centre. The Opening Ceremony, on July 22, found the delegates seated well in advance of the arrival of the platform party followed by the Civic Procession of the Lord Mayors and their attendants from the metropolitan centres, Bristol, Bath, Cardiff and Gloucester. The Right Honourable, the Lord Mayor of Bristol was Mrs. Mercia E. Castle, M.B.E., J.P., who extended the civic welcome after the proceedings were opened officially by President of the I.F.H.E., Dr. Leny Voellmy of Switzerland, who had despatched a Loyal Greeting to Her Majesty the Queen! Her Majesty's Government was represented by the woman Min-

ister of State, Department of Education and Science, Rt. Hon. Alice Bacon, The Duke of Beaufort, Chancellor of the University of Bristol, officially opened the Congress. Then the President of the United Kingdom Federation for Education in Home Economics, Miss Florence F. Laidler, M.Sc., proposed a vote of thanks, after which the first plenary session was held before the colourful Civic Party retired. The pageantry was over, and the working sessions in plenary, sub-plenary, and discussion groups began. The difficulty for the delegates was to choose in which sections of the sessions to participate after savouring the large plenary sessions which stressed three main aspects of Home Economics in action—sociological, scientific and economic, and educational.

The Meetings

Speakers and chairmen representing home economics and associated endeavours in many countries presented material. Dr. Helen C. Abell, of Canada, drew on her many fields of work, in one instance describing interesting facets of group work involving all ranks in her operation of the Training Centre and the Food Services for the C.W.A.C. during World War II.

One discussion group I attended brought a group of twenty delegates together on three occasions to exchange ideas and experiences on the need in the world for expert advisers and teachers for food administration, its materials and equipment. The group brought examples of on-the-job and in-service training. It was learned also, that two degree courses were now beginning in England for the education of top personnel in the food service field; and further, that five programs at the level of a Master in Education (Home Economics) were being offered in Great Britain. In Finland, at the University of Helsinki only, a Master's degree for home economics studies is awarded after 5 or 6 years of university work; the degree granted is in Agriculture and Forestry! We are aware of three other degree courses only in Europe, two in England and one in Holland.

Ideas from the discussion groups were reported in one of the final sessions of the Congress. These, and a summary of guidelines and priorities for the future, assembled by Dr. Lela O'Toole of U.S.A., were

useful for the incoming executive committee. To this committee Dr. Margaret S. McCready of Canada was elected at the General Assembly of the I.F.H.E.; Professor Marjorie Kennish, Canada, a Vice-President, retired from the executive committee.

It would be impossible to do justice to the splendid visits and social occasions arranged for delegates. The Lord Mayor of Bristol, and of Bath, both held lovely buffets for delegates in their handsome Mansion or Town Council Houses. Music by Symphony and other orchestras added to several social affairs, including the very large West Country Supper Party held under a huge marquee in Ashton Park, Bristol. A most memorable small dinner party at the ancient Castle Combe Mansion House Hotel was sponsored by the heads of British home economics colleges for their counterparts from other countries. The trips to nearby Colleges of Education and Home Economics in Bath, Gloucester, and Cardiff covered most interesting terrain and buildings in these famous educational centres. Private dinner parties in homes were much appreciated by many delegates.

Although Canada was one suggestion for the location of the 1973 International Congress, the International Permanent Council voted for the next meetings to be held in Finland.

On to Helsinki in 1973, but meanwhile, your help is sought in building up membership and finances in the much-needed International Federation of Home Economics. To further this endeavour the Canadian Home Economics Association has agreed to forward the individual membership fees, and get receipts for all C.H.E.A. members who will send before March 15th, 1969, the filled-in application form to appear in our January, 1969, Journal, with the \$4.00 cheque or money order in Canadian funds made out to, (to cover membership from January 1 to December 31, 1969)

Canadian Home Economics Association,
901 Burnside Building,
151 Slater Street, Ottawa 4, Ontario.

Hopefully members will seize this opportunity to further the cause of home economics education in the world by becoming individual members of the International Federation of Home Economics.

HOME ECONOMICS REGISTRATION IN CANADIAN UNIVERSITIES—1967-68¹

University	Registered for Degree	By Years				Total Full H.E.	B.Ed. with H.E.	Service Courses Certification Free Elective, etc.	Total 1967-68	Total 1966-67 ²	Degrees Granted 1967
		1	2	3	4						
Laval.....	B.Sc.....	21	12	12	27	3	75	—	—	—	45
British Columbia.....	B.H.Ec.....	50	92	64	51	—	257	26	19	302	52
Alberta.....	B.Sc. (H.Ec.).....	³ 107	102	91	—	3	303	111	85	499	42
Saskatchewan.....	B.Sc. (H.Ec.).....	77	48	43	33	—	201	16	31	248	47
Manitoba.....	B.H.Ec.....	³ 181	118	116	2	⁴ 7-3	—	—	—	—	—
Ottawa.....	B.H.Ec. (Hons)...	—	6	6	2	—	441	—	1	442	81
Toronto.....	B.Sc. (Food Sc.)...	14	6	6	6	—	32	2	—	34	7
Marianopolis College (Montreal).....	B.Sc.....	³ 35	22	22	15	5	99	—	150-44	293	18
Western Ontario.....	B.Sc.....	11	11	7	9	—	38	—	—	—	3
Guelph.....	B.H.Sc.....	58	53	34	—	—	145	—	—	145	14
McGill.....	B.Sc. (H.Ec.).....	97	96	105	76	13	427	—	3	430	68 B.H.Sc.
Montreal.....	B.Sc. (Nutr.).....	³ 40	—	—	—	—	—	—	—	—	3 M.Sc.
Mount Allison.....	B.Sc. (H.Ec.).....	38	27	48	49	1	163	—	2	165	26
Moncton ⁴	B.Sc. (Nutr.).....	26	31	20	13	6	96	—	28	124	27 B.Sc. (Nutr.)
New Brunswick.....	B.Ed.....	22	15	12	27	—	76	—	—	76	17
Mount St. Vincent.....	B. Teaching.....	12	—	—	—	—	12	20	—	32	—
Mount St. Bernard.....	B. Teaching.....	—	—	—	—	—	—	2	4	8	—
St. Francis Xavier.....	B.Sc. (H.Ec.).....	31	10	17	15	—	73	—	—	73	8
Acadia.....	B.Sc. (H.Ec.).....	20	22	18	20	—	80	—	11	91	16
Prince of Wales ⁵	B.Sc. (H.Ec.).....	39	21	27	33	—	120	—	—	120	22
TOTALS.....		889	705	657	378	34+7	2,670	179	395	3,131	493 B.Sc. 4 M.Sc.

¹Numbers as submitted in November 1967.²Figures from C.H.E. Journal, June 1967, p. 41, Column "Total full H.E." might compare more closely in some cases.³Enter with Grade 12 or 13, Senior Matric., First Year Arts, etc.—3 year program.⁴Pre-masters students.⁵In attendance spring semester only.⁶New departments.

INTERNATIONAL FEDERATION OF HOME ECONOMICS

Individual Membership Application Form

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Arrangements have been made for our National Office to accept individual memberships in the International Home Economics Association provided the application is accompanied by a cheque (plus exchange) or money order payable to:

**Canadian Home Economics Association,
901 Burnside Building,
151 Slater Street,
Ottawa 4, Ontario.**

Yearly fees are \$4.00 in Canadian Funds and year is from January 1st to December 31st.
Applications will not be accepted after March 15th, 1969 for the current year.

Short Course University of Saskatchewan

Home management in the care of the disabled will be the theme of a short course to be held at the College of Home Economics, University of Saskatchewan, May 25-31, 1969. It is designed for professionals such as home economists and occupational therapists who are working with families through home care programmes, Family Service Bureaux, Health and Welfare services, and other agencies. During the latter part of the week, home-makers with the care of a physically disabled person in the home will participate.

The course will include discussions of home management and work simplification for the homemaker, meal management, housing problems and clothing for the handicapped. An occupational therapist will demonstrate dressing and feeding techniques which encourage maximum independence of the patient. There will be exhibits of specially designed or modified

clothing, feeding and dressing aids, and other devices which contribute to self-care of the patient and reduction of strain for the homemaker. Representatives of a variety of agencies will discuss community resources available to the physically disabled and their families.

This course is being sponsored jointly by the College of Home Economics, the University Hospital, and the Extension Division of the University of Saskatchewan. For information and application forms write to:

Conference Office, Kirk Hall
University of Saskatchewan
Saskatoon, Sask.

Fees for Course

Occupational Therapists & Home Economists	5½ days	35.00
Homemakers	3½ days	20.00
Residence Accommodation		8.50 room and meals

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